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Twenty-eighth session  
Agenda item 13

REPORT OF THE TRUSTEESHIP COUNCIL

Report of the Commonwealth of Australia on the administration of  
Papua New Guinea for the period from 1 July 1971 to 30 June 1972

Note by the Secretary-General

1. In accordance with the terms of Article 88 of the Charter, the Secretary-General has the honour to transmit to the members of the General Assembly the report of the Commonwealth of Australia on the administration of Papua New Guinea for the period from 1 July 1971 to 30 June 1972.
2. Since, in accordance with rule 73 of the rules of procedure of the Trusteeship Council, the Administering Authority has to furnish the Secretary-General 400 copies of each report for a Trust Territory and, consequently, only a limited number of copies of this report are available, it has not been possible to make a full distribution. Delegations are therefore requested to have the report distributed to them available when this question is under consideration during the twenty-eighth session of the General Assembly.

UNITED NATIONS  
TRUSTEESHIP  
COUNCIL



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Fortieth session  
Agenda item 4 (a)

REPORT OF THE COMMONWEALTH OF AUSTRALIA ON THE ADMINISTRATION OF  
PAPUA NEW GUINEA FOR THE PERIOD FROM 1 JULY 1971 TO 30 JUNE 1972

Note by the Secretary-General

The Secretary-General has the honour to transmit to each member of the Trusteeship Council one copy of the report of the Commonwealth of Australia on the administration of Papua New Guinea for the period from 1 July 1971 to 30 June 1972. <sup>1/</sup> These copies were received by the Secretary-General on 7 August 1973. Advance copies of the report and copies of the supplementary report for the period from 1 July 1972 to 30 April 1973 were made available to members of the Council on 16 May 1973.

Quarantième session  
Point 4 a) de l'ordre du jour

RAPPORT DU COMMONWEALTH D'AUSTRALIE SUR L'ADMINISTRATION DU  
PAPUA-NOUVELLE-GUINEE PENDANT LA PERIODE ALLANT DU  
1er JUILLET 1971 AU 30 JUIN 1972

Note du Secrétaire général

Le Secrétaire général a l'honneur d'adresser à chacun des membres du Conseil de tutelle un exemplaire du rapport du Commonwealth d'Australie sur l'administration du Papua-Nouvelle-Guinée pendant la période allant du 1er juillet 1971 au 30 juin 1972. <sup>1/</sup> Ces exemplaires lui sont parvenus le 7 août 1973. Des exemplaires à distribution préliminaire du rapport et des exemplaires du rapport supplémentaire pour la période allant du 1er juillet 1972 au 30 avril 1973 ont été communiqués aux membres du Conseil le 16 mai 1973.

<sup>1/</sup> Commonwealth of Australia: Administration of Papua New Guinea, 1 July 1971-30 June 1972. Report to the General Assembly of the United Nations. Australian Government Publishing Service, Canberra.



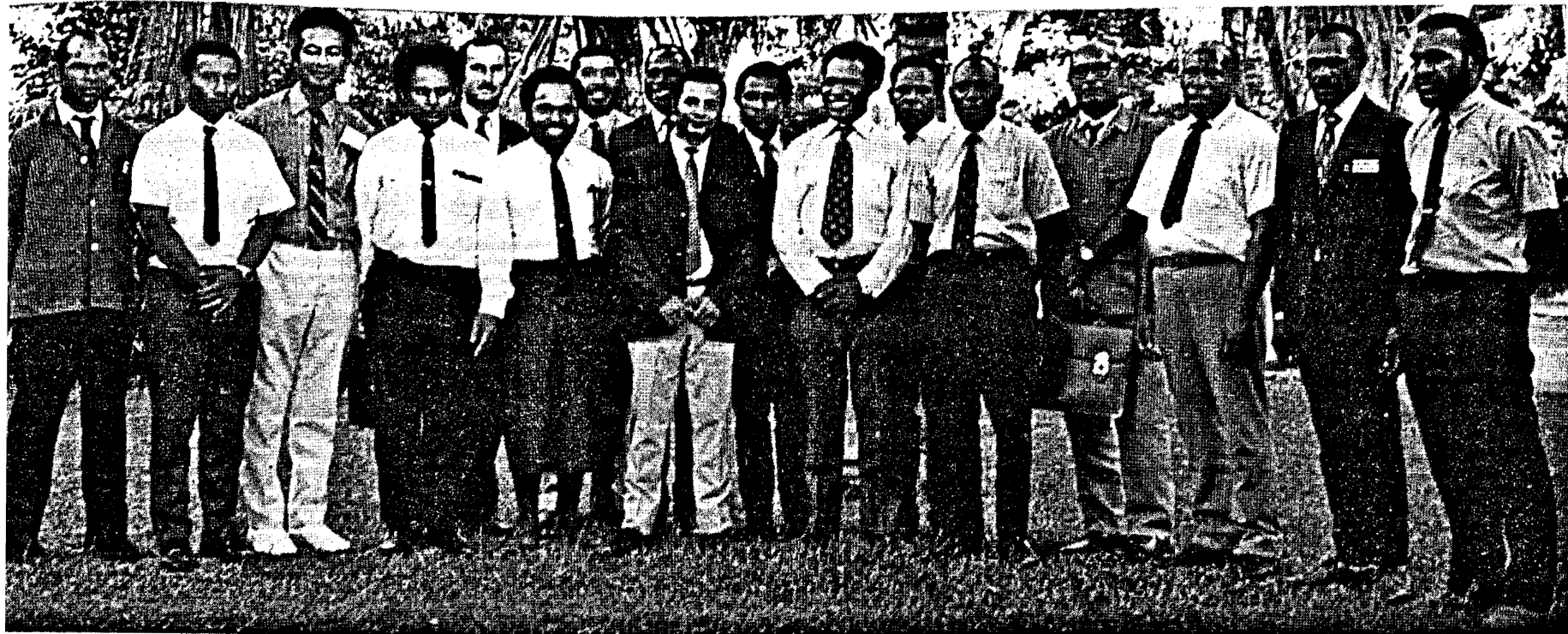


PAPUA  
NEW GUINEA

REPORT FOR

1971-1972

THE PAPUA NEW GUINEA MINISTRY (APRIL 1972) IN THE  
THIRD HOUSE OF ASSEMBLY



(Post-Courier photo)

(Left to Right) Messrs Thomas Kavali, Minister for Works; Julius Chan, Minister for Internal Finance; Dr Reuben Taureka, Minister for Health; John Poe, Minister for Trade and Industry; Bruce Jephcott, Minister for Transport; Michael Somare, Chief Minister; Paulus Arek, Minister for Information; Paul Lapun, Minister for Mines; Gavera Rae, Minister for Labour; Boyamo Sali, Minister for Local Government; Niwia Ebia Olewale, Minister for Education; Albert Maori Kiki, Minister for Lands and Environment; Donatus Mola, Minister for Business Development; Dr John Guise, CBE, Deputy Chief Minister and Minister for Interior; Kaibelt Diria, Minister for Posts and Telegraphs; Moses Sasakila, Minister for Forests; *Ianibukev Okuk*, Minister for Agriculture.

*Report to the General Assembly of the United Nations*

ADMINISTRATION OF  
PAPUA NEW GUINEA

1 JULY 1971—30 JUNE 1972

*(Submitted in conformity with Article 88 of the Charter of the United Nations  
and on the basis of the questionnaire approved by the Trusteeship Council on  
6 June 1952 as amended on 24 July 1958 and 7 July 1961)*

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# Papua New Guinea Annual Report 1971-72

## PART I. INTRODUCTORY DESCRIPTIVE SECTION

### CHAPTER 1

#### GENERAL DESCRIPTION

##### *Location and Area*

The land mass of Papua New Guinea includes that part of the island of New Guinea from east of the border with West Irian to 160 degrees east longitude. It includes the islands of the Bismarek Archipelago, the two northernmost islands of the Solomon Group as well as the Trobriand, Woodlark, D'Entrecasteaux and Louisiade Island groups. The land area of Papua New Guinea is 178,260 square miles (72,142 hectares).

##### *Topography and Drainage*

*Mainland.* The central core of the main island of Papua New Guinea is a massive cordillera which extends some 1,500 miles (about 2,414 kilometres) from one end of the island to the other. This central core forms a complex system of ranges often separated by broad upland valleys.

The principal units of this complex are the Star Mountains and the Hindenberg, Muller, Kubor, Schrader, Bismarek and Owen Stanley Ranges. All of these reach an altitude of 10,000 feet (3,048 metres) or more and each has an individual character. Running parallel to this main range are the northern ranges consisting of the Bewani, Torricelli and Prince Alexander Ranges. The highest peak in Papua New Guinea is Mount Wilhelm which is 14,762 feet high (4,519.45 metres). Between these two main range systems is a Central Depression drained by the Sepik and Ramu Rivers.

The South Eastern portion of this Central Depression is bounded by the central cordillera and the Adelbert, Finisterre and Saruwaged Mountains and is drained by the Markham River which enters the Huon Gulf near Lae.

South of the central cordillera is the Delta Embayment which consists of an extensive zone of foothills rising in tiers from the mainland plains. The western margin of this foothill zone is the headwater tract of the Fly River while the eastern margin ends near Kerema at the head of the Gulf of Papua.

Much of the southern coastline of Papua New Guinea is a continuously sinking zone, subsidence being more rapid in the eastern sector towards Port Moresby than in the western sector toward Daru. The Western District coast is flat and marshy. From Kerema in the Gulf District almost to the China Straits stretches the Moresby coast. This shoreline consists of rocky headlands separated by wide beaches, with a wide and swampy coastal plain between the foothills and the coast.

The eastern coast of the Papua New Guinea Peninsula shows the features of a drowned littoral with a complete absence of coral reef.

*Islands.* The main groups of islands in Papua New Guinea are the Bismarek Archipelago, portion of the Solomon Islands, the Trobriand and D'Entrecasteaux Islands and the Louisiade Archipelago.

The main islands of the Bismarek Archipelago are New Britain, New Ireland and Manus. The main centre of population on New Britain is the Gazelle Peninsula which is also an area of recent volcanism. New Ireland is about 200 miles (about 322 kilometres) long, is exceedingly mountainous and with straight exposed coasts. Manus is hilly and deeply dissected and fringed with almost continuous coral reefs.

Bougainville, which is the largest of those islands of the Solomon Group which lie within Papua New Guinea, is about 127 miles (204 kilometres) long, has a massive mountain range, the Emperor Range, running along almost its entire length. Shoals and fringing reefs are commonly found along the coast.

The Trobriand Islands are physiographically separate from the central mainland cordillera. There are four main islands and several small islets in the group, all of which consist of raised coral limestone.

The D'Entrecasteaux Islands and the Louisiade Archipelago are a continuation of the mainland cordillera. The first group consists of three large and many small islands, and, as these represent the peaks of a submerged mountain range they are steep and hilly. The Louisiade Archipelago is a chain of islands and reefs directly off the tip of the most

easterly point of the mainland, again with three main and many small islands.

#### *Climate*

Papua New Guinea lies wholly within the tropics between the continents of Asia and Australia. It has a typically monsoonal climate. The north-west monsoon, during which the winds blow from north-west or west, lasts from December to March, while the south-east monsoon (trades) season lasts from May to October. During this latter season the winds blow from the south-east or east.

Between these two main seasons transitional periods occur during which the winds change direction. As is characteristic of all monsoon regions the time and intensity of the winds vary from year to year.

Because both the north-west monsoon and the south-east trade winds reach Papua New Guinea heavily laden with moisture most places have an average rainfall of over 80 inches (203 centimetres). There are, however, wide variations from this average, for example, Kikori, in the Gulf District, receives about 200 inches (510 centimetres) a year while Port Moresby, in the Central District, has an average of about 40 inches (102 centimetres).

The length of the day varies only slightly during the year, with a half-hour variation between the limits of sunrise and sunset: dawn and twilight are of short duration.

Atmospheric temperature and humidity are uniformly high throughout the year with the mean maximum temperature seldom exceeding 90 degrees Fahrenheit (32.2 degrees Celsius) and the mean minimum temperature falling below 70 degrees Fahrenheit (21.1 degrees Celsius). The diurnal temperature variation is not extensive in most places: however, there is a general lowering of temperature with increases in elevation, highland areas being cooler than the coastal regions.

#### *Natural Resources*

*Soils.* The soils of most of the inland country are shallow, heavily leached and infertile, with notable exceptions to be found in the broad valleys and an appreciable part of the plateau regions of the central highlands. There are areas in the vicinity of Goroka and Aiyura in the Eastern Highlands District, Mount Hagen in the Western Highlands District, and Chimbu in the Chimbu District where either alluvial soils or soils of volcanic origin occur.

*Minerals.* Minerals known to occur in Papua New Guinea include copper, gold, platinum, silver and limestone. Prospecting for petroleum is conducted. Only copper and gold are mined in quantities of economic significance.

*Vegetation and Timber Resources.* Except in the low rainfall areas most of the land below 6,000 feet (1,850 metres) is covered with rain-forest, characterised by a thick overhead canopy which cuts off the sunlight and inhibits the growth of small bushes. Secondary growth, consisting of a thick tangle of bushes, brambles and creepers, occurs near villages or where the land has been cleared for gardens.

*Fauna.* The fauna of Papua New Guinea is closely related to that of Australia, although the long isolation of the islands from Australia has resulted in the survival of some species which are extinct in Australia.

More detailed information relating to Papua New Guinea has been published in the annual reports on the Trust Territory of New Guinea and the Territory of Papua for 1969-70 and previous years.

## CHAPTER 2

### PEOPLE

#### *Population*

At 30 June 1972 the Papua New Guinean population was estimated to be 2,531,882 of whom 1,845,264 resided in New Guinea and 686,618 in Papua. These figures are compiled from annual village census returns submitted by field officers. No great detail in characteristics of population is available from these statistics, but the division of adults and children, both male and female, is given.

When a comparison is made with the population statistics for 1971, it can be seen that there has been a natural increase of 64,896 for Papua New Guinea.

In addition to the annual census conducted by field officers as part of their patrol duties, the Government Statistician has the power under the *Census (Papua and New Guinea) Ordinance, 1966*, to declare a period to be a census period, for the purpose of collecting information relating to population. To date, two such censuses have been conducted (1966 and 1971). The information from the latter census is still being processed.

#### *Changes and Movements of Population*

Few of the indigenous people travel outside the areas of their linguistic groups except to trade or work. As in many other countries the



cities and towns provide an attraction and there is some population drift to them. The permanent or semi-permanent population in towns and main centres is given a measure of stability by second and third generation town dwellers.

Most districts report problems of varying magnitude in reference to unemployed town dwellers. Constant research is being directed to attempt the easing of problems associated with squatter settlements.

Generally, social groupings are maintained by urbanised persons, with secondary importance being placed by those concerned on formal organisations such as trade unions and associations.

#### *Structure of Tribal Societies*

*Ethnic Structure.* Papua New Guineans comprise a great diversity of physical types and a large number of linguistic groups. They may, in general, be grouped with the Melanesians who occupy the greater part of the Western Pacific.

Probably the chief conclusions which can be drawn from physical studies made of the people is that their origins were diverse and that there has been a considerable amount of moving and mixing among the ancestors of the present-day people.

*Linguistic Structure.* The linguistic pattern is so varied and diverse that members of villages only a few miles apart are often unable to understand one another without an interpreter. Very broadly speaking a division may be made between languages of the Melanesian type, which belong to the Austronesian language family, with a great deal of internal diversity, and, on the other hand, languages which are often called non-Melanesian or Papuan. This latter group does not follow a logical pattern, but there are certain structural resemblances between them.

*Indigenous Religions.* Magico-religious beliefs and practices are an integral part of the indigenous cultures. They are numerous and diverse in character and are largely based on ancestor and spirit worship.

In Papua New Guinea the individual's right to his own customs and beliefs is recognised by law. Those magico-religious practices which are repugnant to the general principles of humanity are prohibited by law. The people have been quite receptive to the evangelistic work of Christian missions and Christian congregations are well established in most areas.

*Social Structure.* The chief characteristics of the traditional social structure of Papua New Guinea are:

- (i) the prevalence of a subsistence economy with a limited range of difference in individual wealth;
- (ii) the recognition of bonds of kinship with obligations extending beyond the family group;
- (iii) generally egalitarian relationships with an emphasis on acquired rather than inherited status; and
- (iv) a strong attachment of the people to their land.

The political unit is small in size with a general absence of formal political institutions. Emphasis is placed upon the formal acquisition of material goods not primarily for personal consumption or the creation of differential living standards, but rather as a means of establishing individual prestige and status within the community through the giving of feasts and the performance of complex sequences of gift-exchanges.

The structure of Papua New Guinea tribal societies has been discussed fully in previous annual reports on the Territory of Papua and the Trust Territory of New Guinea.

The reader interested in more extensive information relating to the people of Papua New Guinea is referred to the 'Encyclopaedia of Papua and New Guinea' (3 vols) published by the Melbourne University Press in association with the University of Papua and New Guinea in 1972.

## CHAPTER 3

### HISTORICAL SURVEY

The island of New Guinea was probably first sighted by Portuguese and Spanish navigators in the early part of the sixteenth century. In 1512 two Portuguese, Anfoncio De Abren and Francisco Serram are thought to have sighted the coast. In 1545 a Spaniard, Ynigo Ortis de Retez, sailed along the north coast. Don Jorge de Meneses, in 1526-27, while sailing along a new route from the Malay Peninsula to the Spice Islands, accidentally discovered land and is credited with calling the island 'Papua'.

The word 'Papua' is thought to have been derived from the local name for the inhabitants and meant people with a dark complexion and frizzled hair. The term 'New Guinea' was applied to the island by de Retez because

of some fancied resemblance between the inhabitants of the north coast and those of the African Guinea Coast.

During the next 170 years other European navigators, most of whom were British or Dutch, visited the island, but, although much of the coastline of the mainland and of the adjacent islands had been explored, little was known of the inhabitants until late in the nineteenth century. European industry's need for coconut oil provided for the first time a market for one of Papua New Guinea's natural products and brought its isolation to an end.

In the 1870s the largest trading firm in the Pacific, Godeffroy's of Hamburg, began trading for copra in the Papua New Guinea islands. In 1884 Germany formally took possession of what came to be called the Trust Territory of New Guinea. The administration of the area, then known as German New Guinea, was placed in the hands of a chartered company, the German New Guinea Company, but in 1899 the Imperial Government assumed control. In 1914 German New Guinea was occupied by Australian troops and remained under military administration until 1921.

On 6 November 1884 a British Protectorate was proclaimed over the southern coast of New Guinea and the adjacent islands lying between the 141st and the 155th meridians of east longitude and the 5th and 12th parallels of latitude. The Protectorate, called British New Guinea was annexed outright on 4 September 1888 thereby becoming a British possession.

Great Britain and the Netherlands concluded a convention to define the boundary between British New Guinea and the Western part of the island then under Netherlands sovereignty. This convention, which was ratified on 20 July 1895, adjusted the western boundary between these areas to its present limits, i.e. from the middle of the mouth of the Bensbach River northward along the meridian passing through that point to the Fly River, thence along the waterway of the Fly River to its northernmost intersection with the 141st meridian of east longitude and thereafter along the 141st meridian to its intersection with the 5th parallel of south latitude.

In accordance with Letters Patent of His Majesty King Edward VII dated 18 March 1902, whereby the Possession of British New Guinea was placed under the authority of the

Commonwealth of Australia, the Government of the Commonwealth of Australia passed the *Papua Act 1905* under which the Possession of British New Guinea became the Territory of Papua. This Act was proclaimed on 1 September 1906 and Australian administration began from that date.

In 1920 the League of Nations, in pursuance of Article 22 of the Covenant of the League, conferred upon his Britannic Majesty, for and on behalf of the Government of the Commonwealth of Australia, a mandate for the government of the Territory of New Guinea. The Commonwealth Parliament passed the *New Guinea Act 1920* to provide for the governing of the Territory in accordance with the Mandate.

New Guinea was administered under the Mandate until the Japanese invasion in December 1941 brought about the suspension of civil administration and the devastation of large areas of the country. The Australian New Guinea Administrative Unit (Angau) with headquarters in Port Moresby was established on 10 April 1942. The Unit became responsible for the administration of the Papua New Guinean inhabitants, and, as far as circumstances permitted, kept plantations in production.

Papua was administered under the Papua Act until it was invaded by the Japanese in 1942 when its civil administration was also suspended. It was then combined with New Guinea under Angau control. The two areas have been administered as one unit since that time.

Following the surrender of the Japanese in 1945 civil administration of Papua New Guinea was progressively restored between October 1945 and June 1946 under the provision of the *Papua-New Guinea Provisional Administration Act 1945-1946*. This Act provided that those parts of New Guinea to which the National Security (Emergency Control) Regulations of the Commonwealth of Australia ceased to apply were to be administered in conjunction with Papua as an administrative union. The two territories were to be called the Territory of Papua and New Guinea with one Administration and one Supreme Court.

At the end of the war the Administration of Papua and New Guinea began the task of recovery and rehabilitation which was progressively accomplished with the help of large grants from the Australian Government and payments of war damage compensation.

The General Assembly of the United Nations on 13 December 1946 approved a Trusteeship Agreement for the administration of New Guinea. This Agreement, inter alia, provides for the receipt of Visiting Missions to visit New Guinea. Such Visiting Missions visited New Guinea on eight occasions—1950, 1953, 1956, 1959, 1962, 1965, 1968 and 1971. In addition, a Visiting Mission to observe the election of a new House of Assembly visited Papua New Guinea early in 1972. A copy of the Trusteeship Agreement is to be found at Appendix XXIII.

The *Papua and New Guinea Act 1949* approved the placing of New Guinea under the International Trusteeship System and provided for the government of New Guinea in an administrative union with Papua with the title of 'The Territory of Papua and New Guinea'.

This Act provided for a Legislative Council for the Territory of Papua and New Guinea (which was established at Port Moresby, Papua, on 26 November 1951) and also for a judicial organisation, a public service and a system of local government. The Legislative Council consisted of the Administrator and twenty-eight other members, sixteen of whom were official members, three were elected members and nine were appointed members. Three of the appointed members were Papua New Guineans.

The size of the Legislative Council was increased following the proclamation of the *Papua and New Guinea Act 1960* to which thirty-seven members, who were to include the Administrator, twelve elected members (of whom six were to be Papua New Guineans elected by the indigenous people), ten appointed members (of whom at least five were to be Papua New Guineans) and four-teen official members.

A House of Assembly replaced the Legislative Council in 1963 following the passage of the *Papua and New Guinea Act 1963*. The First House of Assembly opened on 8 June 1964 and had sixty-four members (which included a Papua New Guinean majority) and ten official members.

The *Papua and New Guinea Act 1967* implemented the recommendation of a Select Committee on Constitutional Development appointed by the first House of Assembly by increasing the number of elected members to the Second House of Assembly to eighty-four. In addition the recommendations of the Select

Committee relating to the executive government were introduced by an amendment to the Papua and New Guinea Act in 1968.

The Second House of Assembly set up a Select Committee on Constitutional Development similar to that set up by the First House. It accepted most of the Committee's recommendations, and as a result of the Australian Government's endorsement of the House of Assembly decision, two sets of amendments to the Papua New Guinea Act were made. The *Papua and New Guinea Act 1971* increased the number of elected members in the House of Assembly to 100, a provision which was first effective for the February-March 1972 General Election. The *Papua New Guinea Act 1971* made extensive amendments to the Act, which are spelt out in more detail in Part V of this report. In summary they are:

- (i) The name of the Territory of New Guinea and the Territory of Papua together is 'Papua New Guinea' instead of 'The Territory of Papua and New Guinea'.
- (ii) Revised membership for the Administrator's Executive Council.
- (iii) The provision for an elected member to hold office as Deputy Chairman of the Administrator's Executive Council.
- (iv) Membership of the House of Assembly to be a minimum of 104 and a maximum of 107.
- (v) The replacement of Ministerial Members and Assistant Ministerial Members by Ministers.
- (vi) A reduction in the number of Official Members in the House of Assembly from ten to four.
- (vii) Provision for up to three additional members to be nominated by resolution of the House.

Local government councils were first established in four areas in 1950. Legislation to expand the composition and functions of local government was brought into operation on 1 January 1965.

Personal taxation was introduced in Papua New Guinea from 1 January 1958, but it is no longer levied. The system of direct taxation was extended still further by the introduction of income tax on 1 August 1959. Export duties were abolished at the same time. The first Papua New Guinea loan was raised in 1960.

The International Bank for Reconstruction and Development sent Missions to undertake

economic surveys of Papua New Guinea in 1963 and 1968. The reports of these Missions were used as a guide for policy and future action. Following these reports the first Five-Year Programme was adopted.

Soon after the House of Assembly passed the *University of Papua and New Guinea Ordinance 1965* and the *Institute of Higher Education Ordinance 1965-1967* the University of Papua and New Guinea and the Institute of Higher Education were established. The University, which is situated in Port Moresby, accepted its first students in 1966 and the Institute, which is situated at Lae in the Morobe District accepted its first students in 1967. The first graduates of the University were awarded their degrees during 1969-70.

The Second House of Assembly appointed several Select Committees and details of these Committee's deliberations and recommendations are set out in the relevant parts of this Report.

Two papers entitled 'Programmes and Policies for the Economic Development of Papua and New Guinea' and 'Economic Development Programmes for Papua and New Guinea' were presented to the House of Assembly in 1969. The purpose of these papers was to provide for forward planning for the 5-year period 1968-69 to 1972-73.

In July 1970 Papua New Guinea was accepted as an Associate Member of the Eco-

nomc Commission for Asia and the Far East (ECAFE), and application for associate membership of the World Health Organisation (WHO) was made on 30 March 1972. Papua New Guinea joined the Asian Development Bank in March 1971.

On 1 July 1971 a special Papua New Guinean Government Gazette proclaimed the introduction of the *National Identity Ordinance 1971* which established Papua New Guinea's national name, the flag and the national emblem. The name is 'Papua New Guinea' and reproductions of the flag and the emblem are to be found in the front of the 1970-1971 Annual Report.

The Third House of Assembly was elected in 1972 with an enlarged House. This House consists of 82 members elected from Open Electorates, 18 members elected from Regional Electorates and 4 official members. Details of these types of electorates are to be found in Part V, Chapter 5 of this Report.

Further information concerning particular facets of Papua New Guinea's history may be found in the 'Encyclopaedia of Papua and New Guinea' (3 vols) published by the Melbourne University Press in association with the University of Papua and New Guinea. 'A Short History of New Guinea' by P. Biskup, B. Jenks and H. Nolan, Revised Edition, Angus and Robertson 1970 may also be consulted.

## PART II. STATUS OF PAPUA NEW GUINEA AND ITS INHABITANTS

### CHAPTER I

#### STATUS OF PAPUA NEW GUINEA

The constitutional authority for the administration of Papua New Guinea is the *Papua New Guinea Act 1949-1971*.

On 13 December 1946 the General Assembly of the United Nations approved the terms of the Trusteeship Agreement which established New Guinea as a Trust Territory. This approval was embodied in the Papua New Guinea Act which became law on 1 July 1949, and which also provided for New Guinea and Papua to be administered by Australia in an administrative union, while preserving the identity and status of New Guinea as a Trust Territory. Subsequent amendments continued to protect these provisions, and to declare the Australian Government's intention

to expend annually in the development and welfare of New Guinea an amount not less than the total amount of public revenue raised in the year in respect of New Guinea.

The *Papua New Guinea Act 1949-1971* provided, in accordance with a resolution of the House of Assembly, that there were to be certain changes when referring to the Territories of Papua and New Guinea and in the Papua and New Guinea Act. Where the name 'the Territory of Papua and New Guinea' occurs in the general sense it is to be replaced wherever possible by the term 'Papua New Guinea' without a reference to 'the Territory'. It is expected of course, that for some little time, there will be some residual references in legal contexts and proper names to the 'Territory' of Papua and/or New Guinea.

Collectively and individually the people are referred to as Papua New Guinean except in any strict technical sense where it may be necessary to refer to a Papuan or New Guinean.

No changes were made during the years in the legislative provisions for defining the legal status of Papua New Guinea. Full information on constitutional changes is to be found in Part I, chapter 3, and Part V, chapters 1 and 2.

## CHAPTER 2

### STATUS OF THE INHABITANTS

The national status of persons born in Papua New Guinea is defined in the *Citizenship Act* 1948-1969 of the Commonwealth of Australia which has been extended to Papua New Guinea.

By the Citizenship Regulations made under this Act persons who are born in New Guinea and who are not British subjects are 'Australian protected persons' and therefore are protected persons within the meaning of the Act. Any Australian protected person may renounce this status at the age of twenty-one years. Persons who are born in Papua are Australian citizens by birth and by virtue of that citizenship they are British subjects. A non-indigenous inhabitant of Papua New

Guinea who was not born there retains his individual national status.

Residence in New Guinea counts as a qualification for the acquisition of Australian citizenship by naturalisation.

Under the Citizenship Act any protected person may be granted a certificate of naturalisation on compliance with the conditions laid down in sections 14 and 15 of the Act. A non-indigenous person who is not a British subject and who was not born in Papua New Guinea may also obtain Australian naturalisation in accordance with the same sections of the Act.

There is no distinction between the various types of status—British subject, alien and protected person—in regard to legal rights and responsibilities, except that aliens are subject to some statutory restrictions, e.g. the necessity to register if they intend to stay in Papua New Guinea for sixty days or more, and ineligibility for the franchise at the House of Assembly elections and for appointment to the Public Service.

An indigenous inhabitant who is an Australian protected person enjoys the same rights in relation to that status as an Australian protected person who is not an indigenous inhabitant. Similarly an indigenous inhabitant who becomes a British subject would, in relation to that status, enjoy the same rights as a natural-born British subject.

## PART III. INTERNATIONAL AND REGIONAL RELATIONS

### CHAPTER 1

#### INTERNATIONAL

The Administering Authority has continued to co-operate with the organs of the United Nations and with the Specialised Agencies in furnishing reports and other information on Papua New Guinea. Papua New Guineans have been included in each of the Australian Delegations to the Trusteeship Council and to the General Assembly. Papua New Guinea representatives have participated in meetings and seminars arranged or sponsored by the World Health Organisation, the Food and Agriculture Organisation, the United Nations Educational, Scientific and Cultural Organisation and the International Labour Organisation. Papua New Guinea Government officials were included in the Australian delegation to the United Nations Conference on Trade and Development at Santiago, Chile.

Information relating to treaties, conventions and agreements applying to Papua New Guinea at 30 June 1972 is to be found at Appendix XXIII. The Trusteeship Agreement for New Guinea appears in the same Appendix.

In addition to the various missionary organisations whose activities are described in other sections of this Report, non-governmental bodies of an international character which are active in Papua New Guinea include the Red Cross Society, the Boy Scouts and Girl Guide Associations, the Young Men's and Young Women's Christian Associations, the Apex, Lions and Rotary Clubs and the Foundation for the Peoples of the South Pacific.

During the year under review Papua New Guinea applied for Associate Membership of the World Health Organisation which is a significant step in that such membership enables the country to directly represent itself in the meetings and working groups of WHO.

Information on United Nations assistance to Papua New Guinea is set out below.

During the period covered by this report Papua New Guinea received UN assistance in the form of—

1. Loans and credits from the World Bank Group (IBRD and IDA) and from the Asian Development Bank (ADB).
2. Technical assistance consisting of services of experts, overseas training fellowships and equipment from the United Nations Development Programme (UNDP), World Health Organisation (WHO) and other UN agencies.

#### *Loans and credits from the World Bank Group and Asian Development Bank*

A number of projects currently in operation in Papua New Guinea are being partially financed with the proceeds of loans from the ADB, the IBRD and with credits from the World Bank's affiliate, the IDA.

Three loans and credits were negotiated during the period under examination. Details are:

- (a) Asian Development Bank SA3.8 (SUS4.5) million loan for 15 years at 3 per cent p.a. interest to assist in the general lending operations of the Papua New Guinea Development Bank.
- (b) IBRD SA8.4 (SUS10) million loan to assist in the continued development of the Telecommunications network in Papua New Guinea as a follow up to an earlier Telecommunications loan. The total cost of this development programme is estimated to be SA21 (SUS25) million.
- (c) IDA SA7.7 (SUS9.2) million credit to assist in the development of the ports of Port Moresby, Lae, Kieta and Alotau. The total estimated cost of this development is SA9.3 (SUS11.1) million.

Details of other loans and credits from IBRD and IDA, which were negotiated for Papua New Guinea and guaranteed by Australia in earlier years, were given in the 1970-71 Annual Report (see pages 7 to 10). These projects are continuing.

#### *United Nations Assistance*

Australia has entered into a number of Agreements covering the terms and conditions under which United Nations aid is being provided. There are 2 United Nations Development Programme (UNDP) agreements, i.e., the

Special Fund Standard Agreement signed on 6 February 1967 and the revised Technical Assistance Standard Agreement signed on 21 May 1968. The Basic Agreement with the United Nations Children's Fund (UNICEF) was signed on 21 December 1967 and the Basic Agreement with the World Health Organisation (WHO) was signed on 17 March 1969.

#### *UNDP Country Programming*

From 1 January 1972 UNDP adopted a new system of administering its assistance programme.

The new system involves the identification of the role of UNDP assistance in specified areas within the country's development objectives. Every UNDP input should be related to one or more of the country's development objectives.

Although UN assisted projects in Papua New Guinea are already administered under the new system, a Country Programme of UNDP aid for Papua New Guinea has not yet been formulated. It is expected that a five year UNDP Country Programme will commence as from 1 July 1973 to coincide with the implementation of the next 5 year Development Programme for Papua New Guinea covering the same period, i.e. 1973/1978.

UNDP has allocated SUS5 million as an Indicative Planning Figure for its Country Programme for Papua New Guinea for the 1973/78 period. A pro-rata figure of SUS1 million per annum has been set for the transition period preceding the adoption of the Country Programme.

Under the new arrangements, the Papua New Guinea Government is required to make a minimum local costs contribution of 8 per cent of the total Indicative Planning Figures for Papua New Guinea.

#### *UNDP Assisted Projects*

(a) UNESCO-UNDP: Secondary Teachers College project at Goroka. This project is to assist the Government in the establishment and initial operation of the College, which is to train teachers for the lower forms of secondary schools. Emphasis is being given to the establishment of a Teaching Advancement Centre to develop Methodology and Educational Materials. Preliminary operations were authorised from January 1968 and the project officially commenced on 28 March 1968 for

the duration of 5 years. The UNDP contribution is \$US1,196,000 and the Government is contributing \$US2,686,000 in kind, plus \$US148,000 towards local operating costs. The project is due to expire by the end of 1972.

(b) UNESCO-UNICEF-UNDP: Joint projects on Science Teaching and Science Education. The project commenced in February 1968, for 3 years, to assist in the revision of science curricula for both students and teachers at primary and secondary levels, with the objective of ensuring scientific literacy and intelligent understanding and appreciation of products of science in daily use. A UNESCO expert was attached to the project. The total contribution is \$US504,000 of which \$US70,900 is from UNDP. \$US373,000 is from UNICEF and \$US60,000 from UNESCO expert services. The Government costs contribution is SA3,593,000. The Science Education project was extended by two years to 1973.

(c) ILO-UNDP: Co-operative College project at Laloki. This project of 3½ years' duration commenced on 1 August 1970 to assist the Papua New Guinea Government in the establishment and initial operation of the College and in the implementation of field extension programmes for employees and members of co-operatives and owners of small business enterprises. The UNDP contribution is \$US546,400. The Government contribution is SA531,650 in kind and cash. The project is due for completion in mid-1974.

(d) ILO-UNDP: Vocational and Industrial Training. This project commenced in April 1970 for approximately one year as a preliminary to a possible major phase. UNDP contribution to the preliminary phase is \$US136,200 consisting of expert services and overseas training fellowships.

(e) WHO-UNDP: Malaria Eradication project. Following recommendations by a UN Economist and a WHO Malariologist, a 3-year project became operational in June 1972. It provides for 3 experts, a sanitarian, and epidemiologist and an entomologist, at a cost to UNDP of \$US254,000, plus various overseas training fellowships from WHO under its regular programme. The Government contribution to the project is \$US12,000 plus local facilities for the 3 experts. This is additional to the Papua New Guinea Government annual budget of approximately SA1.8m for the anti-malaria campaign.

A number of smaller projects are currently in progress in fields such as local entrepreneurship, home economics, wood carving, the establishment of an electronics laboratory and training of laboratory assistants. The total value of UN assistance for these projects is \$US345,500.

Short term fellowships were awarded to Papua New Guineans by UNDP and by other UN agencies for training abroad, including in other developing countries, for an approximate total value of \$US62,000 in fields such as public administration, telecommunications, localisation, education in developing countries, forestry, labour administration and industrial relations, demography and social development.

Short term assignments in Papua New Guinea were carried out during the year under review, and others are still being carried out by UN experts in the fields of telecommunications, vocational training and manpower, and development strategy, for an approximate total value of \$US40,000.

Papua New Guinea has participated in two regional projects under the auspices of the South Pacific Commission and in co-operation with the UN-FAO. These were:

(i) FAO-UNDP-SPC: 5-year project for the control of Coconut Palm Rhinoceros Beetle which commenced in September 1964 and was later extended by 2½ years to 1972. The project is to assist in the evaluation of control measures and training activities in the South Pacific region. UN aid for the whole regional project is valued at \$US0.6m. The Governments of the participating countries are contributing \$US0.7m.

(ii) FAO-UNDP-SPC: 3-year project for the establishment of a regional Fisheries Development Agency in Noumea, to determine fishing areas in the South Pacific region suitable for development. UN aid for the whole project is \$US0.43m. The participating Governments of Australia, France, New Zealand, United Kingdom and United States of America are contributing a total of \$US0.41m.

#### *WHO Assistance Programme*

Australia applied on behalf of Papua New Guinea for it to be admitted as an Associate Member of WHO at the 25th World Health Assembly held in Geneva in May 1972. The application was accepted unanimously by the

Assembly and Papua New Guinea became an Associate Member of WHO on 26 July 1972. On request, Papua New Guinea was assigned to the Western Pacific Region of the Organisation which includes Australia.

Assistance from WHO is based on a forward planning 3 year programme. The value of assistance planned from WHO for Papua New Guinea in 1971 was approximately \$US150,000 (\$A134,000).

The nature and extent of assistance received from WHO during 1971-72 is set out below:

(a) *Malaria Eradication*—Assistance in malaria eradication comprised the provision of a number of fellowships at the Malaria Eradication Training Centre, Manila.

(b) *Short-term Consultants*—Short-term consultants were engaged in such fields as education and training, dental health, nutrition, immunology, child health, anatomy and public health nursing.

(c) *Fellowships*—Fellowships were awarded to Papua New Guinea officers for training in such fields as nursing education, maternal and child health, preventive and social medicine and dental public health.

(d) A Papua New Guinea representative was included in the Australian delegation to attend the 22nd Regional Committee for the Western Pacific, held in Manila in 1971.

(e) Regular WHO seminars and workshops have been attended by Papua New Guinean personnel.

## CHAPTER 2 REGIONAL

The principal organ of inter-territorial co-operation in the region is the South Pacific Commission which was established by the Canberra Agreement of 1947. Metropolitan governments responsible for the administration of non self-governing territories in the South Pacific set up the Commission as an advisory and consultative body on matters affecting the economic, health and social development of the territories and the welfare of the inhabitants. Australia joined the Commission because of its responsibility for the 3 territories of Papua, New Guinea and Norfolk Island and because of its joint responsibility for Nauru.

The Commission, in order to associate the representatives of the island peoples with its annual work programme and to ascertain the

wishes and aspirations of the people of the region, organised in 1950 the first South Pacific Conference. Island representatives of the 17 territories of the region, from both the political and administrative spheres, attended. These meetings have become annual meetings since 1967. Papua New Guinea has attended all South Pacific Conferences and hosted meetings in 1959 in Rabaul and 1965 in Lae. The Eleventh South Pacific Conference, held at Commission Headquarters in Noumea in September 1971, was chaired by Mr Oala Oala-Rarua, then Assistant Ministerial Member for the Treasury—the first Papua New Guinean to do so. Two Members of the House of Assembly, Mr Paulus Arek MHA and Mr Julius Chan MHA, also attended as well as 3 Papua New Guinean advisers Messrs P. Bouraga, A. Farapo and M. Morauta.

Since 1967 the Conference has determined the content and direction of the annual work programme within the limits of available finance (\$A1,217,000 in 1972) and provided advice to the Commission on all matters coming within the function of the Conference.

Following the enactment of the National Identity Ordinance in 1971 Papua New Guinea has been represented in the South Pacific Conference as one territory, not 2 as formerly. On the attainment of independence former territories may join the Commission as participating governments. Thus Western Samoa, Nauru and Fiji joined the Commission in 1964, 1969 and 1971 respectively. It has been the policy of the Australian Government in recent years to include at least one member of the Papua New Guinea House of Assembly in its delegation to the annual Commission meeting of participating governments which follows immediately upon the closing of the annual South Pacific Conference meeting of territories and former territories.

A second regional organisation, the South Pacific Forum is assuming greater importance in the Papua New Guinea milieu.

An ad-hoc gathering of Pacific Island leaders, and representatives of Australia and New Zealand, met in Wellington from 5 to 7 August 1971 for private and informal discussion of a wide range of issues of common concern. The initiative came from the leaders of the independent and self-governing island states all of which are associated with the British Commonwealth.



The President of Nauru, the Prime Ministers of Western Samoa, Tonga and Fiji, the Premier of the Cook Islands, the Australian Minister for External Territories and the Prime Minister of New Zealand were present at the talks which were essentially exploratory, concentrating on matters directly affecting the daily lives of the people of the islands of the South Pacific and devoting particular attention to trade, shipping, tourism and education.

The second meeting of the Forum was held in Canberra from 23 to 25 February 1972. The process of mutual consultation was advanced a stage further. The advantages of co-operation and the opportunity of easy and informal exchanges were found to reinforce a sense of regional identity and common purpose.

The Forum decided to set up a Bureau of Economic Co-operation in Suva to ensure that the process of consultation on trade and related matters, among members and future members of the Forum, be on a continuing basis and that projects considered useful from a regional viewpoint be swiftly implemented.

Papua New Guinea, as a non self-governing territory, does not qualify for membership of the Forum at present. The House of Assembly and administrative officials are kept informed of developments in the Forum. Papua New Guinea political leaders are of the opinion that membership of the Forum should be canvassed prior to the attainment of self-government.

The next Forum meeting was planned for Suva in September 1972.

Besides participation in the Rhinoceros Beetle and Regional Fisheries Development Agency projects mentioned above in the previous chapter, Papua New Guinea contributes to regional co-operation by providing places for Pacific Island and South East Asian students at tertiary institutions such as the University of Papua New Guinea, Vudal Agricultural College, Bulolo Forestry College, Rabaul Valuation College and the Lae Institute of Technology. Considerable numbers of primary and secondary students from the British Solomon Island Protectorate attend mission schools within Papua New Guinea. The Papua New Guinea Government co-operates with the Australian Foreign Aid Programme authorities by providing on-the-job training facilities for both Colombo Plan and South Pacific Aid Programme visiting fellows within the various

administrative departments of the Papua New Guinea Public Service.

An increasing number of higher level government officials from Papua New Guinea are visiting other territories in the Pacific for first-hand information and discussion on mutual island problems. Reciprocal visits from Pacific Island government officials are also arranged.

While no formal international social or religious associations are maintained with the indigenous inhabitants of neighbouring countries, Papua New Guinean leaders, generally speaking, are very much aware of those common foundations behind the religious and social institutions which they have adapted or adopted in Papua New Guinea society.

### CHAPTER 3

#### ADMINISTRATIVE UNION OF PAPUA AND NEW GUINEA

The basis of Papua New Guinea's legislative, administrative and judicial systems is the *Papua New Guinea Act 1949-1971* of the Commonwealth of Australia, which came into force on 1 July 1949. The Act approved the placing of the Trust Territory of New Guinea under the International Trusteeship System and, in accordance with Article 5 of the Trusteeship Agreement for New Guinea, provided for its administration in an administrative union with the Territory of Papua. Article 5 of the Trusteeship Agreement states:

It is agreed that the Administering Authority, in the exercise of its powers under Article 4, will be at liberty to bring the Territory into a customs, fiscal or administrative union or federation with other dependent territories under its jurisdiction or control, and to establish common services between the Territory and any or all of these Territories if in its opinion it would be in the interests of the Territory and not inconsistent with the basic objectives of the trusteeship system to do so.

The Papua New Guinea Act expressly declares the intention of the Australian Government to maintain the identity and status of New Guinea as a trust territory and of Papua as a Crown possession.

The practical operation of the administrative union is explained in succeeding chapters of this report.

No plans exist to establish separate legislative, judicial and administrative organs for Papua and for New Guinea, or to transfer the headquarters of the Administration or of the Supreme Court from Port Moresby.

Section 11 of the Papua and New Guinea Act requires that there be expended annually in New Guinea upon its administration, welfare and development, an amount which is not less than the total amount of public revenue raised there in that year. As mentioned in Chapter I of Section 1 of Part VI the revenues and expenditures of Papua and New Guinea are recorded separately, those costs common to both being apportioned to each on an appropriate basis. Revenue and expenditure from revenue in Papua New Guinea

as shown in Appendix IV. The level of expenditure has risen substantially each year with a corresponding increase in the deficit which has been met by a direct grant from the Administering Authority. These grants are interest free and non-repayable.

Separate statistics are compiled for Papua and New Guinea in the categories prescribed by Regulations under the *Statistics Ordinance* 1950 and in a supplementary series for the purposes of this Report.

## PART IV. INTERNATIONAL PEACE AND SECURITY: MAINTENANCE OF LAW AND ORDER

### CHAPTER 1

#### POLICE FORCE

##### *Constitution and Control*

The Police Force is constituted and regulated under the *Royal Papua and New Guinea Constabulary Ordinance* 1965-1970.

Under the Ordinance, the Administrator is the Commandant of the Constabulary. The Commissioner of Police is charged with the superintendence of the Force.

The Constabulary is divided into 3 Branches:

(i) The Regular Constabulary: This Branch is the main operational component of the Force and is responsible for the provision and maintenance of general and specialised Police services in defined Police Zones throughout Papua New Guinea.

(ii) The Field Constabulary: This comprises field officers of the Division of District Administration within the Department of the Administrator. These officers, supported by small Police detachments, exercise Police powers in areas other than Police Zones.

(iii) The Reserve Constabulary: In this Branch the personnel are overseas and Papua New Guinean civilian volunteers trained by members of the Regular Constabulary in aspects of general Police duties. Reserve Constabulary detachments are generally restricted to the main centres.

The Administrator also may appoint Special Constables as, and when, necessary.

The Constabulary is responsible for administering and policing the following legislation:

- *Royal Papua and New Guinea Constabulary Ordinance* 1965-1970.
- *Firearms Regulation Ordinance* 1963-1970.
- *Motor Traffic Ordinance* 1950-1968.

In addition it enforces certain sections of other Ordinances, which include:

- Criminal Code (Queensland, adopted).*
- Criminal Law (Escapes) Ordinance* 1968.
- Gaming Ordinance* 1959-1962.
- Gaming (Playing Cards) Ordinance* 1965-1968.
- Liquor (Licensing) Ordinance* 1963-1968.
- Liquor (Miscellaneous Provisions) Ordinance* 1963.
- Pawn-brokers Ordinance* 1951.
- Police Offences Ordinances (New Guinea and Papua).
- Police Offences (Rubbish Dumping) Ordinance* 1969.
- Poisons and Dangerous Substances Ordinance* 1952-1967.
- Prevention of Cruelty to Animals Ordinance* 1951-1962.
- Public Order Ordinance* 1970.
- Second Hand Dealers Ordinance* 1968.
- Vagrancy Ordinance* 1912-1964 (Papua).

##### *Functions and Establishment*

The functions of the Force include:

- Protection of life and property.
- Prevention and detection of crime.

- Apprehension and bringing to justice of criminals.
- The preservation of peace and the maintenance of good order.
- Motor registration, traffic control and driver licensing.
- Registration, recording and control of firearms.
- Inspection of licensed premises.
- Training of members of the Constabulary, at all levels, in all facets of Police duties and responsibilities.
- Service of court processes and execution of warrants.

As at 30 June 1972 the strength of the Regular Constabulary was 3,761 all ranks, consisting of 3,513 local non-commissioned officers and constables, 77 local and 171 overseas commissioned officers. Localisation was 100 per cent below commissioned rank, 31 per cent in the commissioned officers and 95.5 per cent overall.

The secondment of experienced police officers from Australian State Police Forces is effected from time to time to assist in the training and development of local members.

A Police Administrative Branch of 266 public servants provides administrative services associated with the Force's operations.

At 30 June 1972 a total of 119 overseas, and 64 Papua New Guinean commissioned officers and 2,990 non-commissioned officers were serving at stations, depots and posts (other than Police Headquarters and the Police College Bomana). Of the 48 Police Stations, 11 were under the control of Papua New Guinean officers. Forty-five rural Police posts were operating under the control of Papua New Guinean non-commissioned officers.

Total strength of Headquarters personnel in Port Moresby at 30 June 1972 including the Police College at Bomana, was 52 overseas and 13 local commissioned officers and 623 non-commissioned officers and constables. Of these, 409 members were in training as cadet officers and probationary constables, or attending specialised courses.

As well as performing routine police duties in urban and rural areas, members are employed as instructors, bandsmen, drivers, cooks and in such specialist activities as fingerprinting, photography, prosecutions, traffic control, etc. Policemen also accompany patrols

carried out by officers of the Division of District Administration to provide police services in areas outside the regular police zones.

#### *Conditions of Service*

Papua New Guinean members are granted leave of absence on full pay on the basis of one month's leave for each completed year of service with a paid leave fare to the administrative headquarters of their home sub-district once every two years. Six months furlough is granted to a member after 20 years of completed service.

Where the availability of housing permits, accommodation is provided for married as well as single members.

All members are entitled, in appropriate circumstances, to payment of overtime, shift allowance and other penalty rates, and patrol and travelling allowances.

Under the *Public Officers Superannuation Ordinance 1971*, which came into force on 1 January 1972 all the then serving local members of the Constabulary became contributors to the Public Officers Superannuation Fund with provision for the exercise of an election by such members to revert to the pension scheme already provided under the Police Ordinance.

Both schemes provide for a pension for the widow and dependent children of a deceased member or a deceased pensioner. For all local members who were engaged on or after 1 January 1972 the new scheme is compulsory and without election.

Overseas members of the Force serve under terms and conditions of employment generally comparable with those of overseas officers of the Public Service.

#### *Industrial Organisations*

The Police Association represents both overseas and Papua New Guinean members, with membership limited to ranks of Inspector Second Class and below.

Membership of the Senior Police Officers' Guild includes all officers above the rank of Inspector First Class.

#### *Recruitment and Training*

*Recruitment.* Recruits must meet minimum physical and educational standards and be of good character. In an attempt to raise the educational standard of the Force preference

is given to recruits with a minimum educational standard of Form II, provided that, on this approach, the tribal-representative character of the Force is not significantly affected.

Successful applicants are appointed as Probationary Constables. After a prescribed period of training, appointment as Constables is confirmed.

Cadet Officers are recruited from outside the Force and from among suitable serving members. In addition to strict requirements of good character and physique, prospective Cadet Officers must have a minimum educational Standard of Form IV.

Five officers from Australian State Police Forces were seconded in the year 1971-72 to provide specialist skills and training in communications, technical services, prosecutions, investigations and instructional techniques.

*Recruit Training.* On recruitment as Probationary Constables, members undergo an initial six months' training course at the Police College, Bomana, in such subjects as police report writing, elementary law, physical training and self-defence, hygiene, foot drill, weapons training, police functions, traffic control and first aid. On completion of this training, the Probationary Constables are posted to police stations throughout Papua New Guinea. After 2 years satisfactory service on probation, the appointment of members is normally confirmed in the rank of Constable.

*Officer Training.* Papua New Guinean Cadet Officers undergo a 3-year training course at the Police College, Bomana. Cadets spend a total of 16 months in theoretical training through classroom instruction and 20 months in practical in-service training at police stations throughout the country. Upon the successful completion of the course, they graduate as Sub-Inspectors.

*Training Establishments.* The Police College at Bomana has accommodation for 450 cadets and recruit trainees. The College also provides accommodation for local and overseas instructors and staff messes, canteens, classrooms, language laboratory, sporting fields, gymnasium, swimming pool, drill sheds, first aid post, administrative offices, armoury and weapons store, and a driving school.

Three hundred and seventeen Probationary Constables passed out during 1971-72 and 21 Papua New Guinean Cadet Officers graduated as Sub-Inspectors.

*Special Training Courses.* In addition to the programme of Cadet Officer and recruit training at the College, certain specialist courses were available at the College and at other Administration training institutions.

Selected Papua New Guinean officers attended courses in Australia in prosecutions, illicit drugs and management.

## CHAPTER 2

### PUBLIC ORDER

The incidence of civil disorder, particularly in the Highlands, increased in the past year. Local Court cases involving offences against public order totalled 22,380, an increase of over 25 per cent on the previous year. The restoration and preservation of peace required more widespread and forceful use of the police. The greater number of disturbances were inter-tribal and arose from disputes over land and property, and family disagreements. The number of incidents arising from an original dispute becomes compounded because of recourse to the traditional 'pay back' concept. More frequent recourse to traditional methods and weapons for the resolution of disputes occurred in the period under review, and violence often broke out between disputing factions with little warning.

While attempting to settle a land dispute at Kabaira Plantation in August 1971 the East New Britain District Commissioner, Mr E. J. Emanuel, was killed. Of 21 villagers charged with wilful murder, seven were discharged and fourteen committed for trial. At the end of the 140 day trial the Chief Justice, in sentencing 5 of the villagers to prison terms ranging from 18 months to 14 years, said that because of extenuating circumstances it would not be just to inflict the death penalty. The Chief Justice considered that the concept of ownership of land as understood in English law was completely foreign to the Tolai way of thinking and that the land of the Kabaira Plantation, which was the subject of the dispute, was in the villagers' view essential to their existence. They had been frustrated because recourse to legal processes, which they did not really comprehend, to regain possession of the land had been unsuccessful.

Skirmishing continued in the Gazelle Peninsula between rival Tolai factions supporting the Mataungan Association and supporting the Gazelle Peninsula Local Government Council with constant threats and minor cases of

violence. In August 1971 Professor R. F. Salisbury reported on his inquiry into Problems of the Gazelle Peninsula. His recommendations related to local government and its relation to the central government, land issues, the Tolai Cocoa Project, and business and other aspects of economic development. His concluding sentence read, 'The Tolai people must solve their own problems; the Administration can only help'. The Gazelle problems are still being resolved but there has been some easing of tension and a decrease in the incidence of civil disorder has followed the election in 1972 of 3 Mataungan Association candidates to the House of Assembly.

Cargo cults are a phenomenon which have an extensive appeal in Papua New Guinea and tend to have a disruptive influence. They have been manifest during the year in the Sepik, the Highlands and islands of Manus, New Ireland, New Britain and Bougainville. The cult leader of the Peli Association in the Sepik, Mathias Yeliwan, was elected to the House of Assembly; cult supporters in neighbouring electorates refused to vote if they could not vote for him. (The Department of Public Health recognises some responsibilities for cargo cultists who may be mentally disturbed and further information may be found in Part VII, chapter 7). In general, however, public order was maintained throughout the campaign and elections for the House of Assembly, and the United Nations Mission observing the elections reported that everyone was given an opportunity to vote and that the conduct of the elections was fair.

### CHAPTER 3

#### DEFENCE FORCES

Obligations accepted by the Administering Authority under the United Nations Charter and Trusteeship Agreement require that it will remain responsible for the defence of Papua New Guinea until independence. The defence forces in Papua New Guinea are constituted and regulated under the *Defence Act 1903-1970* of Australia. The future development of the defence forces in the period up until independence must be shaped in consultation with Papua New Guinea Government Ministers to the post-independence needs of that country.

In February 1972 the Australian Minister of State for Defence announced that it had been decided to form a Joint Force Headquarters to replace the existing 3 service command

arrangements. This decision was taken to facilitate economical and effective administration and control of the forces. Such a headquarters, with a Joint Force Commander, is more practical for the size of force Papua New Guinea is likely to require in the foreseeable future.

Decisions taken now regarding matters such as organisation, training and equipment will have very long-term effects, and increasing attention is being given to measures to associate Papua New Guinea Government authorities with defence matters affecting Papua New Guinea. In June 1972 the then Australian Minister of State for Defence foreshadowed in discussions with Papua New Guinea Ministers the appointment, should it be desired, of a Defence Spokesman in the Papua New Guinea House of Assembly, and the establishment of a small Defence Section within the Department of the Administrator to advise and support the Defence Spokesman. The Minister offered to second an experienced officer from the Australian Department of Defence to initially head the Section.

The Minister said that development of the Papua New Guinea Defence Force and the defence relationships between Australia and Papua New Guinea after independence will be a matter for elaboration and agreement between the two countries at the time. However, it is anticipated that Australia's contribution to the training, organisation and support of local forces, the supply of equipment and the development of infrastructure, could well be required to continue, possibly at significant levels. It would be expected that Australia could be prepared to help in this way if this is desired by the Government of Papua New Guinea.

#### *Army Component*

The Papua New Guinea Army is being developed to provide for a well disciplined, stable and reliable force completely loyal to the Government of Papua New Guinea.

Army units in Papua New Guinea are under the command of HQ Army Component Papua New Guinea which is part of Joint Force Papua New Guinea.

Regular units of the Army Component consist of two battalions of the Pacific Islands Regiment, headquarters and support troops. At 30 June 1972 their total strength was 3,436 of which Papua New Guineans numbered 2,819 including 38 officers and 1,020

non-commissioned officers. Many officers in the Army component are Australian but a policy of replacing them progressively with Papua New Guineans is being followed.

The First Battalion, Pacific Islands Regiment is located at Taurama Barracks near Port Moresby. The second battalion is located at Moem barracks near Wewak. Each battalion maintains a one company out-station at Lae and Vanimo respectively. Units at Igam Barracks, Lae, also include an Area Headquarters, an Army Aviation Flight, a Military Cadet School for the preliminary training of Papua New Guinean officers, and the Headquarters of the Citizen's Military Forces battalion, the Papua New Guinea Volunteer Rifles. The Papua New Guinea Command Training Depot is located at Goldie River near Port Moresby. Detachments of the Papua New Guinea Volunteer Rifles are located at various centres through Papua New Guinea.

*Recruitment.* Volunteers exceed requirements and therefore, in order to establish a national army truly representative of Papua New Guinea, recruitment quotas are laid down for all districts in proportion to their population, thus ensuring that recruits are drawn in appropriate numbers from all parts of the country. Recruiting teams, which visit all districts and main centres annually, base their selection not only on educational qualifications, which vary considerably between areas, but also on special tests and evaluation procedures designed to assess the intending recruit's potential to benefit from the type of training the Army gives. These tests and procedures have been developed over a number of years.

*Training.* Throughout the soldier's service, both in training and in unit life, a strong emphasis is placed on education and citizenship training with the aim of developing in him a sense of responsibility to his people and his country and ultimately an efficient, stable, reliable and truly national army. The majority of recruits have had contact with the work of Christian missions and chaplains have been appointed to look after the religious welfare of soldiers.

To overcome difficulties of communication stemming from differences between tribal dialects the use of Pidgin (Neo-Melanesian) is wide spread throughout the Army. Considerable attention is given to instruction in the initial stages in both oral and written English.

English language studies, as the basis for further academic, technical and military education, continue during unit service as do adult-oriented studies in arithmetic, science and social studies.

On completion of recruit training, soldiers are allocated to units for further training or to specific advanced training courses in accordance with their abilities, aptitudes and interests, but opportunities for further training for promotion or specialist work are continually available to those in the former group.

Many soldiers undertake full-time or part-time courses to meet the Army's need for tradesmen trained to full civil apprenticeship standards in the mechanical, electrical engineering, building and other trades, and for members, filling specialist occupations (such as cooks, butchers, plant operators, supplies inspectors, medical technicians and hygiene inspectors) where a high degree of civil skill is required. Training is undertaken through Papua New Guinea Government apprentice-training institutions, at the Arms and Services Wing of the Training Depot at Goldie River, or in units, as appropriate. Throughout his Army service, the soldier continues to study under the Citizenship Training Programme which emphasises his responsibilities as a citizen.

Some specialised training is still undertaken in Australia but this will decrease as the availability of appropriate courses in civil or Army institutions increases. It is planned that increasing use will also be made of Papua New Guinea tertiary education and higher technical training institutions as Service members reach the appropriate levels in larger numbers.

Training received in the course of Army service has considerable residual benefit for those members separating from the Army, either on retirement or on completion of engagement, and for the community at large.

*Officer Training.* Production of General Service Officers is primarily the responsibility of the Officer Cadet School, Portsea, (Australia). Candidates are selected mainly from school leavers, and more recently from within the ranks of the Army. After basic training at the Papua New Guinea Training Depot, Goldie River, candidates are prepared for entry to the Officer Cadet School during an 18 months course at the Military Cadet School, Lae. On average, it takes 24 years to produce a General Service Officer. A more recent system of

officer production is the in-service commissioning of senior NCOs and warrant officers after attendance at a special qualifying course. To date, a total of 38 Papua New Guinea Army officers have been commissioned and there are 77 officer cadets undergoing training, including 6 now at tertiary institutions in Papua New Guinea through Army sponsorship. These are studying medicine, architecture and electrical and mechanical engineering.

*Activities.* Members serving with units of the Pacific Islands Regiment spend up to 5 months of each year on patrol in some of the most difficult terrain in the world, gathering topographical information and making contact with remoter groups within the community. Members of support, logistic and base units also undertake specialised patrols, or accompany the normal patrols. During these patrols, members are exercised in their military and occupational skills in addition to carrying out specific patrol tasks. Such patrols cover all districts of Papua New Guinea, and are organised in close consultation with the Papua New Guinea Government.

*Civic Action.* Civic action is conducted by the Army at the request of the Papua New Guinea Government in those more remote areas visited by patrols of the Pacific Islands Regiment. It takes the form of physical and technical assistance to villages in construction and production techniques on projects of a community nature. Projects are nominated by the villagers and, after consideration by the Government, are undertaken on a self-help basis, the villagers participating in the provision of labour and local materials.

While on these tasks, soldiers work with the members of the community to whom they are rendering assistance. This provides opportunities for improving inter-tribal relationships, increases the soldiers' own knowledge and experience of the civilian community and assists generally in the realisation of a spirit of nationalism for soldier and civilian alike.

#### *Naval Component*

The Naval Component of the Joint Force Papua New Guinea comprising 5 patrol craft has continued its primary task of assisting the civil administration in maritime surveillance throughout the island area. Patrol craft have, on several occasions, taken part in sea air rescue operations and have also rendered valuable assistance to the civil population in the aftermath of earthquake and cyclone damage.

The present overall Papua New Guinean strength of the Naval Component is as follows:

- (i) 228 including recruits and officer cadets at Marine Cadet School, Lae; of these,
- (ii) 25 are officers or petty officers trained or in training.

With the exception of the Commanding Officer's and two senior sailors' billets in each patrol craft, sufficient Papua New Guinean personnel have now been trained to a degree where they are capable of carrying out the remaining duties alloat. The requirements of Base Maintenance Support continue to be met, in the main, by RAN personnel.

Recruit and branch training is carried out at the RAN Fuelling Facility at Manus Island. Training for technical officers is being conducted at Marine Cadet School Lae from where officer cadets will proceed to the Lae Institute of Technology. Training for cadet Midshipmen and advanced trade training for apprentices continues to be provided at various naval establishments in Australia.

#### *Air Component*

The Royal Australian Air Force is represented within the Joint Force by the Air Component Commander, an Air Operations Officer, a Joint Planning Officer and a detachment of 27 personnel equipped with 3 Caribou aircraft. The detachment provides transport support for the Joint Force. Additional RAAF transport support is supplied from Australian based units when required.

## CHAPTER 4

### CIVIL DEFENCE AND EMERGENCY SERVICES

The Civil Defence and Emergency Services Branch is part of the Department of the Administrator with the function of co-ordinating the emergency services of Papua New Guinea. It operates under the provisions of the *Emergency Provisions Ordinance 1960* (No. 35 of 1960).

The staff consists of a Director and subordinate staff in Port Moresby with an outstation at Rabaul. In each District, however, the District Commissioner is the local controller for all emergencies in his District. In the event of emergencies volunteer staff are called on by the local controller. The staff at Port Moresby maintain a twenty-four hour a day availability seven days a week.

### *Activities*

During the year the Branch was engaged in 75 land and sea emergencies. These included major earthquakes and seismic sea waves in the New Britain-New Ireland area in July 1971 and the cyclones 'Hannah' and 'Ida' in May 1972. Assistance was provided in several instances of accidents and deaths at sea.

Long unsuccessful searches were also made for two people who are presumed dead, one at sea at Port Moresby and the other on Mt Wilhelm in the Chimbu District.

The radio network belonging to the Branch was expanded to 18 locations to provide better coverage during emergency operations.

### *Training*

Civil defence volunteer groups of local officers are trained in districts where trained staff is available. Specialised training is given to Papua New Guinea Government officials and privately employed persons, when these are on recreation leave in Australia, at the Australian Civil Defence School, Mt Macedon, Victoria.

## PART V. POLITICAL ADVANCEMENT

### CHAPTER 1

#### GENERAL POLITICAL STRUCTURE

##### *General:*

The *Papua New Guinea Act 1949-1971* provides for the administration of the Trust Territory of New Guinea in an administrative union with the Territory of Papua in accordance with Article 5 of the Trusteeship Agreement for New Guinea. A copy of the Trusteeship Agreement is at Appendix XXIII.

The Act is administered by the Minister of State for External Territories through the Australian Department of External Territories. The Ministers for External Territories during the year under review were the Hon. C. E. Barnes, MP (until 2 February 1972) and the Hon. Andrew S. Peacock.

The Act provides for the appointment of an Administrator to administer the Government of Papua New Guinea on behalf of the Administering Authority, but Ministers of the House of Assembly appointed under the Act exercised full authority and final responsibility in many areas of government throughout the year under review.

The Act also provides for a House of Assembly, comprising:

- (a) between 1968 and 1971: 94 members including 84 elected members and 10 official members;
- (b) from the 1972 general election: 104 members including 100 elected members and 4 official members (with a provision for up to 3 members nominated by resolution of the House of Assembly that has not yet been utilised).

The House of Assembly has power, subject to the Act, to make ordinances for the peace, order and good government of Papua New Guinea.

Amendments to the *Papua New Guinea Act* in 1968 introduced changes designed to give elected members of the House of Assembly a greater share in the executive government of Papua New Guinea, by providing for the appointment of 7 Ministerial Members, and up to 10 Assistant Ministerial Members, from elected members of the House of Assembly.

In 1971 there were major amendments to the *Papua New Guinea Act* following the Australian Government's concurrence with recommendations in the report made by the Select Committee on Constitutional Development set up by the 1968-72 House of Assembly. The new provisions increased the membership of the House of Assembly. The amendments to the Act also abolished the offices of Ministerial Members and Assistant Ministerial Members, and replaced them with up to 17 officers of Minister. For the first time the Act made provision for a senior elected position in the Ministry. It was provided that the Ministers should elect from among their number a Deputy Chairman of the Administrator's Executive Council who chairs the Council whenever the Administrator does not attend.

Prior to mid-1970, Ministerial Members were jointly responsible with departmental heads for the overall activities of their departments and for the framing of policy proposals (including expenditure), while Assistant Ministerial Members worked with departmental heads on specified areas of departmental policy and carried out duties of a ministerial





*(Above) Cyclone damage at Tufi in the Northern District.*

(DIES photo)

*(Below) The Minister for Information, Paulus Arek receives a cheque from Radio Wewak as disaster relief for the victims of the cyclone.*

(DIES photo)



nature. Determinations under the Act made by the Minister of State for External Territories, since August 1970, changed the position to enable all ministerial office holders to exercise full authority and accept full responsibility for specified matters within the functions of their respective departments. Specified matters (determined by the Minister of State for External Territories under sections 24 and 25 of the Act) are matters in which Papua New Guinea ministerial office holders are given the power of final decision making. In respect of non-specified matters, ministerial office holders were then responsible within the broader framework of government policy for administrative actions of their departments and for the formulation of policy proposals. Ministerial office holders represented their departments in the House of Assembly, for example, in regard to motions, questions and introduction and carriage of legislation.

With the change to full ministerial status in April 1972, the responsibilities of Ministers initially remained the same as previous Ministerial Members and Assistant Ministerial Members. However, it was announced that discussions between the Australian and Papua New Guinea Governments would take place in July/August 1972 aimed at transferring a further range of functions to the control of Papua New Guinea Ministers.

The 1968 amendments to the Papua New Guinea Act replaced the former Administrator's Council by the Administrator's Executive Council. This Council consisted of the Administrator, 3 official members of the House of Assembly appointed by the Minister of State for External Territories on the nomination of the Administrator, and the seven members holding office as Ministerial Members. In addition the Minister for External Territories on the nomination of the Administrator, could appoint an additional elected member of the House of Assembly to the Administrator's Executive Council. The 1971 amendments to the Act abolished the nominated elected member and added three further Ministers to the Council to make a total of 10 Ministers, 3 official Members and the Administrator. As mentioned earlier, one of the Ministers is the Deputy Chairman of the Council.

The functions of the Administrator's Executive Council are defined by the Act as being to advise the Administrator on any matter referred by him to it, or in accordance with

an Ordinance, on any other matter. Under the Ministerial Determinations, sections 24 and 25 of the Act, Ministers are to refer policy decisions or other matters to the Council for decision where they consider it necessary or where the Council or the Administrator so directs. In relation to specified matters, the Administrator is instructed by the Governor-General under Section 15 of the Papua New Guinea Act to accept the advice of the Council, so that, subject only to the programmes and policies agreed upon between the Administering Authority and the House of Assembly or Council, or lawful agreements and obligations entered into by or on behalf of Papua New Guinea, the Council is the final policy-making and executive body for a wide range of government functions.

The *Local Government Ordinance 1963-71* provides for a system of local government adaptable to all areas having regard to the different stages of economic, social and political development attained by various parts of Papua New Guinea. Further information concerning local government councils is given below and in Chapter 3 of this Part.

The Supreme Court of Papua New Guinea, established under the Papua New Guinea Act, is the highest judicial tribunal in Papua New Guinea and the only court possessing general jurisdiction over civil and criminal matters. Details relating to the Supreme Court and courts of lesser jurisdiction are found in Part V, Chapter 7 on the Judiciary.

The administrative functions of government are discharged by eighteen functional departments, the public service administration of which is in each case the responsibility of the departmental head. A critical oversight of the organisation and work methods of the departments is exercised through its own departmental organisation by the Public Service Board which is directly responsible to the Minister of State for External Territories. The officers of the eighteen functional departments and of the Department of the Public Service Board are members of the Public Service of Papua New Guinea. Further information on the establishment of the Public Service Board is set out in Chapter 4 of this Part of the Report.

#### *Policy and Political Development Plans*

The Governor-General of Australia opened the Third House of Assembly on 20 April

1972 and in his speech referred to the major themes of the Administering Authority's policy in Papua New Guinea. The Governor-General said:

'Australia will continue to observe its obligations under the United Nations Charter—to promote the political, economic, educational and social advancement of Papua New Guinea in accordance with the freely expressed wishes of the people.

It is the policy of my Government to encourage the movement towards self-government but not to impose self-government upon Papua New Guinea. To this end my Government looks to this House to represent the wishes of the majority of the people and to take the initiative on the pace and nature of constitutional development'.

An essential part of Papua New Guinea's development will be its economic progress. Australia's attitude on this was made clear by the Governor-General:

'My Government has contributed very large resources of money and skilled men and women to Papua New Guinea's economic advancement in order to put its people more firmly in control of their own affairs and, in time, to reduce its dependence on outside aid.

This House is well fitted to decide the form of development best suited to the needs and wishes of the people in the future. The Administration will table in the House this year a White Paper on the strategies for a new national development programme to be introduced in 1973.

This will enable the House to discuss the main issues fully before the programme is drawn up. It is the hope of my advisers that this programme will be shaped by, and bear the clear imprint of this House and will win, through the efforts of Members in their own electorates, the support of the people.

The new programme will depend heavily on outside aid. My Government confirms its undertaking that the movement to self-government will not affect its intention to continue providing large scale aid'.

Papua New Guinea is known to the world outside as a single country. Speaking about this important aspect the Governor-General referred to the views of the United Nations and the Papua New Guinea House of Assembly:

'In its resolution on Papua New Guinea in December 1971 the General Assembly of the United Nations stressed the development of Papua New Guinea as a single political and territorial entity. It urged further that separatist movements be discouraged and the unity of the country preserved through the period leading up to independence.

In the eyes of the world outside, Papua New Guinea already has a distinctive character as a developing nation. The last House of Assembly showed its concern for national unity by declaring that unity is essential to the progress of Papua New Guinea as a modern state, with enough resources and population to sustain a developing economy. My Government holds the same view'.

In the period under review considerable advances have been made in the political life of Papua New Guinea. Following the February-March 1972 General Elections a National Coalition Government emerged with a majority in the House of Assembly. It has displayed increasing cohesion and leadership in its early days, and its leader, Mr Michael Somare, has become widely recognised as the country's political leader exercising considerable authority. Mr Somare's position under the Papua New Guinea Act is Deputy Chairman of the Administrator's Executive Council, which empowers him to chair the Council in the Administrator's absence. The Administrator has in fact progressively withdrawn from meetings of the Council and this has enabled the Deputy Chairman to emerge as a Chief Minister leading a team of Ministers who have rapidly assumed responsibility for many spheres of government in Papua New Guinea.

On 23 June 1972 the Chief Minister announced in the House of Assembly the establishment of a Constitutional Planning Committee.

The progress already achieved in central government would have been impossible without the basis provided by experience of local government. Since 1950, when the first 4 native local government councils were established covering a population of 15,400 people, the system of local government has been extended until there are now 158 councils covering an approximate population of 2,265,500 people.

Revision of the judicial system of Papua New Guinea is continuing. A review of the jurisdiction, supervision and localisation of the Lower Courts system has been completed and more detailed studies arising out of the recommendations of the review are being carried out. Investigations and examination of other aspects of the courts system are being carried out also.

Political awareness has also been fostered by the appointment of Papua New Guineans to statutory boards and committees, by the co-operative and trade union movements and indirectly by indigenous participation in the work of various non-governmental associations, by women's clubs, sporting clubs and by many forms of adult education. These activities have been vigorously promoted over a period of years as necessary aids to the continuing process of advancement.

An essential complement to rapid political and economic development is education of the people to enable them to understand developments, and to express their opinions on the direction which they want their country to take. The National Coalition Government has indicated that it intends to place considerable emphasis on political education and will intensify the existing programme.

## CHAPTER 2

### PAPUA NEW GUINEA GOVERNMENT

#### *Structure*

The general structure of the government of Papua New Guinea is described in Chapter 1 of this Part and the administrative organisation is illustrated by the chart in Appendix II.

The Administrator of Papua New Guinea during the period covered by this report was Mr Leslie Wilson Johnson, who assumed office on 23 July 1970.

#### *Legislative Organs*

The main legislative organ is the House of Assembly which has power to make ordinances, subject to the Papua New Guinea Act, for the peace, order and good government of Papua New Guinea. Legislation in the form of regulations pursuant to ordinance are made by the Administrator-in-Council.

#### *The House of Assembly*

The House of Assembly is established under the provisions of the *Papua New Guinea Act 1949-71*. The Administrator must ensure that general elections are held at intervals not exceeding 4 years.

For the February/March 1972 House of Assembly elections, Papua New Guinea was divided into eighty-two open electorates and eighteen regional electorates as prepared by the Electoral Boundaries Distribution Committee appointed by the Administrator under the provisions of the *Electoral Ordinance 1963-71* and adopted by the House of Assembly. Each elector is entitled to vote both for the Open and for the Regional Electorate for which he is enrolled. The electors of Papua New Guinea are listed on a common roll. The qualifications of electors and the method of election are described in Chapter 5 of this Part.

The Electoral Ordinance defines the qualifications of candidates. A candidate for election must be an elector of Papua New Guinea who is enrolled for the electorate for which he is nominated. Candidates must have been born in Papua New Guinea; to have lived there for a continuous period of 5 years; or to have been an elected member of the House of Assembly or the Legislative Council of Papua New Guinea. A candidate may only stand for one electorate at each election. He is disqualified from nomination if he is a member of the Public Service of Australia or Papua New Guinea, or holds a specified statutory office; if he is insolvent or an undischarged bankrupt, if he is under sentence of death, or if he is undergoing imprisonment for one year or longer. Nominations must be made according to the prescribed procedure and each nomination must be accompanied by the sum of \$100. The sum is refunded if the candidate is elected or polls more than one-eighth of the number of first preferences of the successful candidate.

The Electoral Ordinance was amended in 1971 to extend the entitlement to enrolment of all persons not under eighteen, who satisfy existing requirements for enrolment, other than aliens. A further amendment restricted the age qualification for nomination so that a person who has not attained the age of twenty-one years is not qualified to nominate.

Services for the House of Assembly are provided by the Department of the House of

Assembly, which is a department of the Public Service.

The Clerk of the House of Assembly is functionally responsible to the Speaker for control of the Department of the House of Assembly. He is authorised to take action required of a Departmental Head insofar as it relates to officers of the Department.

The Department provides ceremonial, secretarial and administrative services. It maintains House records, including the 'Hansard' of House proceedings. Members are provided with a library, and legal, drafting, and research assistance. An interpretation section undertakes simultaneous interpretation of proceedings and document translation, in English, Pidgin, and Police Motu.

The principal language of the House of Assembly is English. Minutes are kept, and a verbatim record is made of the proceedings. The language most commonly spoken is Pidgin although the record of the proceedings is in English.

#### *Legislation*

The Papua New Guinea Act requires that an ordinance passed by the House of Assembly, shall not have any force or effect until it has been assented to by the Administrator or, in certain cases specified in the Act, by the Governor-General.

Every ordinance passed by the House of Assembly is presented to the Administrator for his assent. The Administrator may assent to an ordinance; withhold assent; or reserve the ordinance for the Governor-General's pleasure. Certain classes of ordinance set out in section 55 of the Papua New Guinea Act must be reserved by the Administrator for the Governor-General's pleasure. The Administrator may also return the ordinance to the House of Assembly with recommended amendments, which the House of Assembly then considers and the ordinance, with or without the amendments, is again presented to the Administrator for assent.

Where an ordinance is reserved for the Governor-General's pleasure, he shall within 6 months declare that he assents to the ordinance in whole or in part or that he withholds assent in whole or in part. He also may return the ordinance to the Administrator with recommended amendments, which are then considered by the House of Assembly and the ordinance, with or without the amendments is again reserved for the Governor-General's pleasure.

The Governor-General may, within 6 months of the Administrator's assent, disallow an ordinance or part of an ordinance or may recommend amendments. Each ordinance to which assent has been given or withheld is laid before each House of the Australian Parliament and where assent is withheld or where an ordinance is disallowed, the Minister of State for External Territories must, in addition, cause a statement of the reasons for withholding assent or disallowance, as the case may be, to be laid before each House.

The Australian Government has given an undertaking not to advise the withholding of assent or disallowance of ordinances on matters over which final authority has been transferred to the Papua New Guinea Ministers. No ordinances were disallowed nor was assent refused during the period under review.

Under Section 50 of the *Papua New Guinea Act 1949-71* a vote, resolution or proposed law for the appropriation of revenue or moneys shall not be passed by the House of Assembly unless the purpose of the appropriation has, in the same session, been recommended by message of the Administrator. The order and conduct of the business and proceedings of the House are provided for by Standing Orders made by the House.

#### *Composition of the House*

The time span of this report covers the end of the Second House of Assembly and the early weeks of the Third House. The Second House of Assembly elected in 1968 was prorogued on 29 November 1971. The Second House of Assembly consisted of 94 members as follows:

- (i) 69 persons elected by electors of Papua New Guinea;
- (ii) 15 persons, being persons possessing such educational qualifications as are specified by, or determined under, the regulations, elected by electors of Papua New Guinea; and
- (iii) 10 persons, known as official members, appointed by the Governor-General on the nomination of the Administrator.

During the period covered by this Report, the Second House of Assembly met on the following dates: 30 August to 1 October 1971 and 8 November to 26 November 1971.

The Third House of Assembly consists of 104 members as follows:

- (i) 82 persons elected by electors of Papua New Guinea;

(ii) 18 persons, being persons possessing such educational qualifications as are specified by, or determined under, the regulations, elected by electors of Papua New Guinea; and

(iii) 4 persons, known as official members, appointed by the Governor-General on the nomination of the Administrator.

Provision exists for the appointment by the House of Assembly of not more than 3 persons, to be known as nominated members, who would raise the total membership of the House to 107. None have been appointed during the year under review.

The Third House of Assembly met on the following dates: 20 April to 28 April 1972; 13 June to 28 June 1972.

An official member must be an officer of the Papua New Guinea Public Service, or a person who holds a specified statutory office. Official members hold office during the pleasure of the Governor-General.

#### *The Second House of Assembly*

The membership of the Second House at 29 November 1971 (day of prorogation) was:

#### *Speaker*

John Guise, CBE, Member for Alotau Open Electorate.

| <i>Elected Members</i> | <i>Open Electorates</i> |
|------------------------|-------------------------|
| Nauwi Sauinambi        | Ambunti-Yangoru         |
| Peter Garth Johnson    | Angoram                 |
| James Meangarum        | Bogia                   |
| Karigl Bonggere        | Chimbu                  |
| Yauwe Wauwe Moses      | Chauve                  |
| Sinake Giregire        | Daulo                   |
| Kokomo Uli'a           | Dreikikir               |
| Timothy James Ward     | Esa'ala                 |
| Meck Singiliong        | Finschhafen             |
| Matthias Tutanava      | Gazelle                 |
| ToLimán, CBE           |                         |
| Louis Sebu Mona        | Goitála                 |
| Sabumei Kofikai        | Goroka                  |
| Ninkama Bomai          | Gumine                  |
| Pena Ou                | Hagen                   |
| Bono Azanifa           | Henganofi               |
| Toua Kapena, CBE       | Hiri                    |
| Michael Marveta        | Huon Gulf               |
| Kaniniba               |                         |
| Turi Wari              | Ialibu                  |
| Paulus Arek            | Ijivitari               |
| Thomas Kavali          | Jimi                    |
| Rauke Gam              | Kabwum                  |
| Yano Belo              | Kagua                   |
| Noel Michael Casey     | Kainantu                |
| Anani Maino            | Kaindi                  |

#### *Elected Members*

Koitaga Mano  
 Koriam Michael  
 Urekit  
 Daniel Bokap  
 Tore Lokoloko  
 Siwi Kurondo  
 Tom Koraea  
 Oscar Tammur  
 Traimya Kambipi  
 Andrew Andagari  
 Wabiria  
 Lepani Watson  
 Poio Iuri  
 Pupuna Aruno  
 Angniai Bilas  
 Paliau Maloat, OBE  
 Pita Lus  
 Thomas Leahy  
 Momei Pangial  
 James McKinnon  
 Percy Chatterton  
 Momei Pangial  
 Mangobing Kakun  
 Julius Chan  
 Patik Nimambot  
 Tegi Ebei'al  
 Donatus Mola  
 Warren Dutton  
 Muriso Warebu  
 Epineri Titimur  
 John Poe  
 Nathaniel Ian Uro  
 Kantigane Endekan  
 Wilson Suja  
 Paul Lapun  
 Niwia Ebia Olewale  
 John Middleton  
 John Maneke  
 Matiabe Yuwi  
 Wesani Iwoksim  
 Tei Abal  
 Kaibelt Diria  
 Yakob Talis  
 Leme Iangalo  
 Brere Awol, MBE  
 Beibi Yembanda  
 Joseph Adrian Lue  
 Oala Oala-Rarua  
 John Nilles  
 Dennis Buchanan  
 Oriel Irving Ashton  
 Michael Tom Somare  
 Jason James Garrett  
 Walter Andrew  
 Lussick

#### *Open Electorates*

Kandep-Tambul  
 Kandrian-Pomio  
 Kavieng  
 Kerema  
 Kerowagi  
 Kikori  
 Kokopo  
 Kompiam-Baiyer  
 Koroba  
 Kula  
 Lagaip  
 Lufa  
 Mabusu  
 Manus  
 Maprik  
 Markham  
 Mendi  
 Middle Ramu  
 Moresby  
 Mul-Dei  
 Munya  
 Namatanai  
 Nawae  
 Nipa  
 North Bougainville  
 North Fly  
 Okapa  
 Rabaul  
 Rai Coast  
 Rigo-Abau  
 Sinasina  
 Sohe  
 South Bougainville  
 South Fly  
 Sumkar  
 Talasea  
 Tari  
 Upper Sepik  
 Wabag  
 Wahgi  
 Wapei-Nuku  
 Wapenamanda  
 West Sepik Coastal  
 Wewak  
 Bougainville  
 Central  
 Chimbu  
 Eastern Highlands  
 East and West New  
 Britain  
 East Sepik  
 Madang  
 Manus and New  
 Ireland

| <i>Elected Members</i> | <i>Regional Electorates</i> |
|------------------------|-----------------------------|
| Cecil Abel             | Milne Bay                   |
| Anthony Constantine    | Morobe                      |
| Voutas                 |                             |
| William John Fielding  | Northern                    |
| Ronald Thomas          | Southern Highlands          |
| Dalton Neville         |                             |
| Virgil Baden Counsel   | Western and Gulf            |
| John Watts             | Western Highlands           |
| Joe Paul Langro        | West Sepik                  |

*Vacancies—Regional and Open Electorates*

There were no vacant seats for Regional or Open Electorates.

No by-elections were held between 1 July 1971 and the prorogation of the Second House.

*Official Members*

|                                 |   |
|---------------------------------|---|
| Anthony Philip                  | John Newman, Deputy Administrator                       |
| Thomas William Ellis, MBE, DFC, | Secretary, Department of the Administrator              |
| Donald Stuart Grove,            | Director of Lands, Surveys and Mines                    |
| Lindsay James Curtis,           | Secretary for Law                                       |
| Henry Parker Ritchie, CMG,      | Treasurer   |
| Charles Geoffrey Littler,       | District Inspector, Division of District Administration |
| Stanley Michael Foley,          | District Commissioner, Mount Hagen                      |
| Ronald Thomas Galloway,         | District Commissioner, Lae.                             |

*Vacancies—Official Members:* The two vacancies noted in the previous Report remained unfilled at the prorogation of the Second House.

*Legislation*

From 1 July 1971 until prorogation, the Second House of Assembly adopted 71 Bills of which 5 were private members' Bills. Assent was not withheld from any of the Bills passed by the House in this period nor were any ordinances disallowed.

*Committees*

At the day of prorogation the Second House of Assembly had established the following committees:

*Standing*

|                                   |
|-----------------------------------|
| Budget Committee                  |
| Economic Development Committee    |
| House Committee                   |
| Library Committee                 |
| Ministerial Nominations Committee |

|                                   |
|-----------------------------------|
| Private Business Committee        |
| Privileges Committee              |
| Subordinate Legislation Committee |
| Standing Orders Committee         |

*Statutory*

|   |
|---|
| Broadcasting of Parliamentary Proceedings Committee |
| Public Accounts Committee                           |
| Public Works Committee                              |

*Select*

|  |
|--|
| New and Permanent House of Assembly Building Committee   |
| Role of Overseas Public Servants Committee   |
| War Damage Compensation Committee  |
| and the following Select Committees which had made their final reports to the House of Assembly: |
| Constitutional Development Committee   |
| House of Assembly Procedures Committee   |
| Land Development Committee   |
| Superannuation Scheme for Members of the House of Assembly Committee                             |
| Transport Committee  |

*The Third House of Assembly:*

Mr Perry Kwan was elected Speaker of the House on 20 April 1972 and served until 22 June 1972. The membership of the House at 30 June 1972 was:

*Speaker*

Mr Barry Blyth Holloway, Member for Eastern Highlands Regional Electorate.

| <i>Elected Members</i> | <i>Open Electorates</i> |
|------------------------|-------------------------|
| John Guise, CBE        | Alotau                  |
| William Eichhorn       | Angoram                 |
| Bewa Tou               | Bewani                  |
| Stanis Toliman         | Bogia                   |
| Gedisa Gwaju           | Bulolo                  |
| Raphael Bele           | Central Bougainville    |
| John Kaupa             | Chuave                  |
| Sinake Giregire        | Daulo                   |
| Parua Kuri             | Dei                     |
| Toromble Kabai         | Dreikikir               |
| Timothy James Ward     | Esa'ala                 |
| Malengu Doi            | Finschhafen             |
| Matthias Tutanava      | Gazelle                 |
| Toliman, CBE           |                         |
| Louis Sebu Mona        | Goilala                 |
| Akepa Miakwe           | Goroka                  |
| Ninkama Bomai          | Gumine                  |
| Pena Ou                | Hagen                   |
| Atihemi Kimi           | Henganofi               |
| Gideon Apeng           | Huon Gulf               |
| Turi Wari              | Ialibu-Pangia           |
| Paulus Arek            | Ijivitari               |



| <i>Elected Members</i> | <i>Open Electorates</i> | <i>Elected Members</i> | <i>Open Electorates</i> |
|------------------------|-------------------------|------------------------|-------------------------|
| Thomas Kavali          | Jimi                    | Tei Abal               | Wabag                   |
| Buaki Singeri          | Kabwun                  | Kaibelt Diria          | Wahgi                   |
| Yano Belo              | Kagua-Erave             | Yakob Talis            | Wapei-Nuku              |
| Sasakila Moses         | Kainantu                | Pato Kakarya           | Wapenamanda             |
| Stanton Ronald         | Kairuku-Hiri            | Brere Awol, MBE        | West Sepik Coastal      |
| Slaughter              |                         | Thomas O'Shannessy     | Wewak                   |
| Nenk Pasul             | Kandep-Porgera          | John Matik             | Wosera-Gaui             |
| Galopo Masa            | Kandrian-Gloucestera    | Matias Yaliwan         | Yangoru-Saussia         |
| Inuabe Egaiano         | Karimui-Nomane          | John Momis             | Bougainville            |
| Perry Kwan             | Kavieng                 | Josephine Abaijah      | Central                 |
| Tore Lokoloko          | Kerama                  | Iambakey Okuk          | Chimbu                  |
| Wena Wili              | Kerowagi                | Damién Kereku          | East New Britain        |
| Dodobai Wautai         | Kikori                  | Michael Somare         | East Sepik              |
| Oscar Tammur           | Kokopo                  | Tom Koraea             | Gulf                    |
| Traimya Kambipi        | Kompiani-Baiyer         | Bruce Reginald         | Madang                  |
| Andrew Andagari        | Koroba-Kopiago          | Jephcott               |                         |
| Wabiria                |                         | Pikah Kasau            | Manus                   |
| John Fifita            | Kula                    | Dennis Charles Young   | Milne Bay               |
| Joseph Iuanga          | Kundiawa                | Boyamo Sali            | Morobe                  |
| Toni Ila               | Lae                     | Obed Boas              | New Ireland             |
| Waitea Magnolius       | Lagaip                  | MacKenzie Daudi        | Northern                |
| Suinavi Otio           | Lufa                    | Ronald Thomas Dalton   | Southern Highlands      |
| Angmai Bilas           | Madang                  | Neville                |                         |
| Michael Pondros        | Manus                   | Naipuri Maina          | Western                 |
| Pita Lus               | Maprik                  | Anton Parao            | Western Highlands       |
| Phillip Buseng         | Markham                 | John Maneke            | West New Britain        |
| Momei Pangial          | Mendi                   | Paul Langro            | West Sepik              |
| Manasseh Voeto         | Menyama                 |                        |                         |
| Gavera Rea             | Moresby Coastal         |                        |                         |
| Albert Maori Kiki      | Moresby Inland          |                        |                         |
| Karigl Bonggere        | Mount Wilhelm           |                        |                         |
| Mek Nugints            | Mul                     |                        |                         |
| Julius Chan            | Namatanai               |                        |                         |
| Amenao Okona           | Nawae                   |                        |                         |
| Ihne Kor               | Nipa                    |                        |                         |
| Donatus Mola           | North Bougainville      |                        |                         |
| Krenem Wonhenai        | North Fly               |                        |                         |
| Onamauta Beibi         | Obura                   |                        |                         |
| John Pokia             | Okapa                   |                        |                         |
| Koriam Urakit          | Pomio                   |                        |                         |
| Awali Ungunaibe        | Pooma-Kutubu            |                        |                         |
| John Kaputin           | Rabaul                  |                        |                         |
| John Poe               | Rai Coast               |                        |                         |
| Reuben Taureka         | Rigo-Abau               |                        |                         |
| Kobale Kale            | Sinasina                |                        |                         |
| Stephen Tago           | Sohe                    |                        |                         |
| Paul Lapun             | South Bougainville      |                        |                         |
| Niwia Ebia Olewale     | South Fly               |                        |                         |
| John Maxwell           | Sumkar                  |                        |                         |
| Middleton              |                         |                        |                         |
| Henry Charles          | Talasea                 |                        |                         |
| Humphreys              |                         |                        |                         |
| Koitaga Mano           | Tambul-Nebilyer         |                        |                         |
| Matiabe Yuwi           | Tari                    |                        |                         |
| Anskar Karmel          | Upper Sepik             |                        |                         |
| Marcus Kawo            | Usino-Bundi             |                        |                         |

*Vacancies—Regional and Open Electorates*

At the end of the period covered by this Report, the seat for Middle Ramu Open Electorate was vacant, and the seat for Kairuku-Hiri Open Electorate was in dispute. *Middle Ramu Open*—A supplementary election of a member was to commence on 1 July 1972 subsequent to a writ issued by the Administrator in pursuance of Sections 55 and 79 of the *Electoral Ordinance* 1963-71 on 10 April 1972. The supplementary election was necessary because the election of a Member to represent the Electorate, the polling which was to commence on 19 February 1972, failed in consequence of the death of a candidate. (Mr Kui Baiyang was declared elected on 6 July 1972.)

*Kairuku-Hiri Open*—The court of Disputed Returns is considering a petition in regard to this electorate. The petition is based on the loss and spoiling of ballot papers while crossing a flooded creek during transportation prior to counting.

*Official Members*

Anthony Philip John Newman, Deputy Administrator



Thomas William Ellis, MBE, DFC, Secretary, Department of the Administrator  
Henry Parker Ritchie, CMG, Treasurer  
William John Francis Kearney, Secretary for Law.

*Vacancies—Official Members:* There are no vacant official seats.

*Nominated Members:* Although there is provision for 3 nominated members, no person has been nominated.

#### *Legislation*

During the year under review the Third House of Assembly adopted 24 Bills, none of which were private member Bills. No Bills passed by the House in this period have been disallowed nor has assent been withheld. Recommended amendments by the Administrator to the Cemeteries (Fees) Ordinance 1972 were agreed to by the House.

#### *Committees*

The House of Assembly has established the following committees:

##### *Standing*

- Budget Committee
- Economic Development Committee
- House Committee
- Library Committee
- Ministerial Nominations Committee
- Private Business Committee
- Privileges Committee
- Standing Orders Committee
- Subordinate Legislation Committee

##### *Statutory*

- Broadcasting of Parliamentary Proceedings Committee
- Public Accounts Committee
- Public Works Committee

##### *Subject*

- Finance and Public Service Committee
- Land and Industries Committee
- Law and Local Administration Committee
- Welfare and Social Development Committee
- Works and Services Committee

No select committees have been established.

#### *The Administrator's Executive Council*

The functions of the Council are set out in the *Papua New Guinea Act 1949-71*. They are to advise the Administrator on any matters which he is required by ordinance to

refer to the Council for advice and on any matters which he refers to it at his own discretion. As mentioned previously, under the Act, the Administrator is not bound to act in conformity with the advice of the Council, but has been instructed by the Governor-General that when the matter concerned falls within the final decision making powers of a Papua New Guinea Minister he is to accept the Council's advice. Subject to this instruction if he fails to act in accordance with the Council's advice in any other case where it is provided by an ordinance that an Act or thing shall or may be done by the Administrator in Council he must provide the House of Assembly with a statement of his reasons not later than the first sitting day of its next meeting. During the year under review it has not been necessary for the Administrator to take this action.

Subject to the duty and responsibility of the Administrator acting on behalf of the Australian Government to administer Papua New Guinea, the Administrator's Executive Council is the executive body of Papua New Guinea, responsible for collective decision-making in areas where Papua New Guinea Ministers hold final decision-making power and advice to the Australian Government in areas where Australia retains final decision-making powers. An amendment to the Papua New Guinea Act in 1971 altered the composition of the Council. Formerly it consisted of the Administrator, 3 official members of the House of Assembly, and 7 Ministerial Members of the House of Assembly. In addition there was an elected member of the House who was appointed to the Council and became its spokesman in June 1970. The 1971 amendment removed the additional elected member and provided for the appointment of 10 Ministers of the House of Assembly. One of these is Deputy Chairman of the Council who is elected by Ministers of the House of Assembly from among their number.

The composition of the Council as at 30 June 1972 was as follows:

#### *The Administrator*

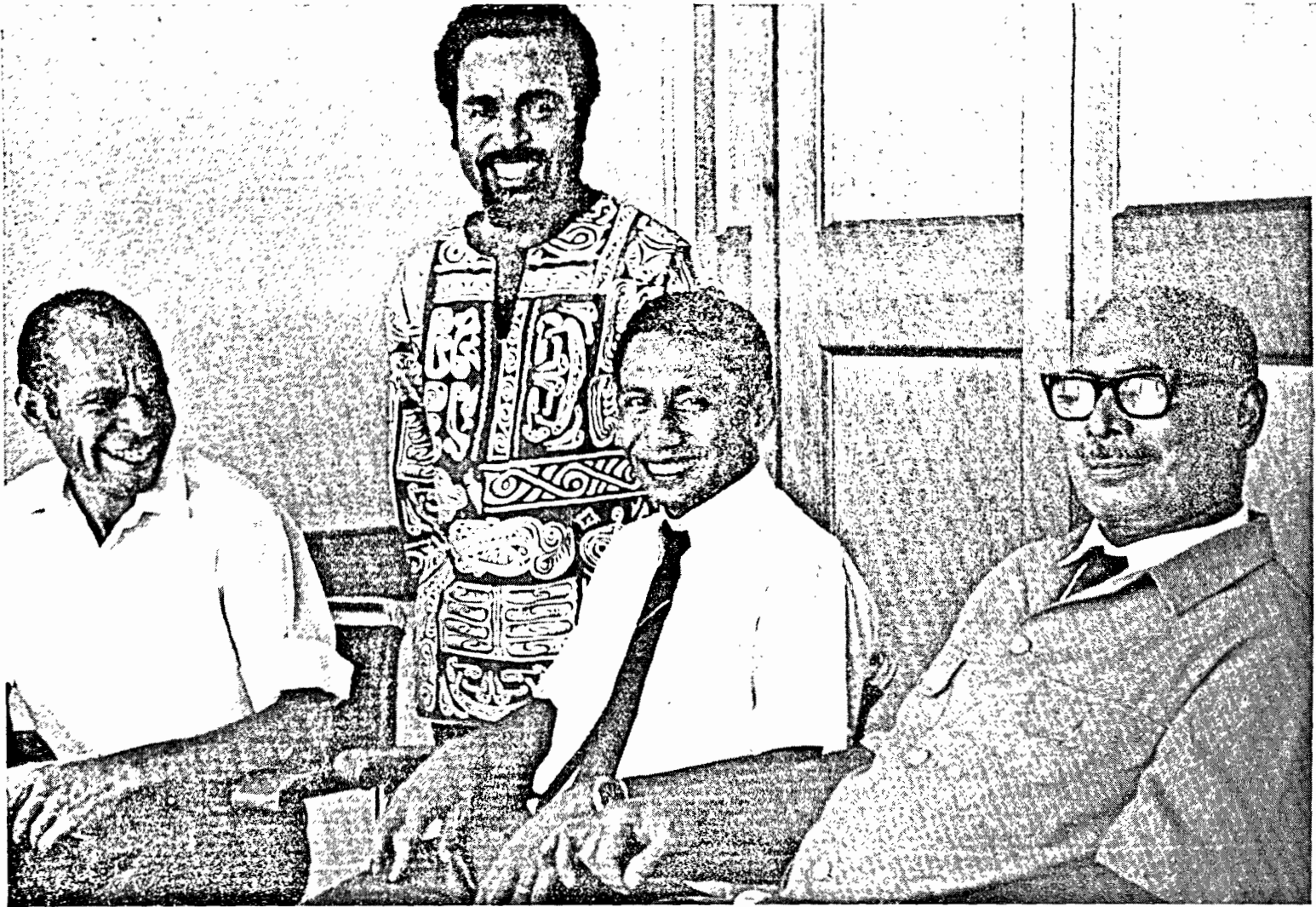
Mr Leslie Wilson Johnson

#### *Ministers of the House of Assembly*

Deputy Chairman—Mr Michael Thomas Somare (Chief Minister)

Nine other Ministers of the House of Assembly—

Mr Iambakey Palma Okuk—Minister for Agriculture, Stock and Fisheries



(Post-Courier photo)

*The leaders of the major groups in the National Coalition (Left to Right) Mr Thomas Kavali, leader of the National Party; Mr Michael Somare, Chief Minister and leader of Pangu Pati; Mr Julius Chan, leader of the Peoples Progress Party; and Dr John Guise, the Deputy Chief Minister and leading independent member of the Coalition.*

PAPUA NEW GUINEA  

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BALLOT-PAPER

POMIO OPEN ELECTORATE

ELECTION OF ONE MEMBER OF THE HOUSE  
OF ASSEMBLY

Directions—Mark your Vote on this Ballot-Paper by placing the Numbers 1, 2, 3 and 4 in the squares respectively opposite the names of the candidates so as to indicate the order of your preference for them.



KORIAM MICHAEL  
IRIKIT



KAOLEA GOLPAK



JOHN ALTAPUA



JULIUS TAIUL

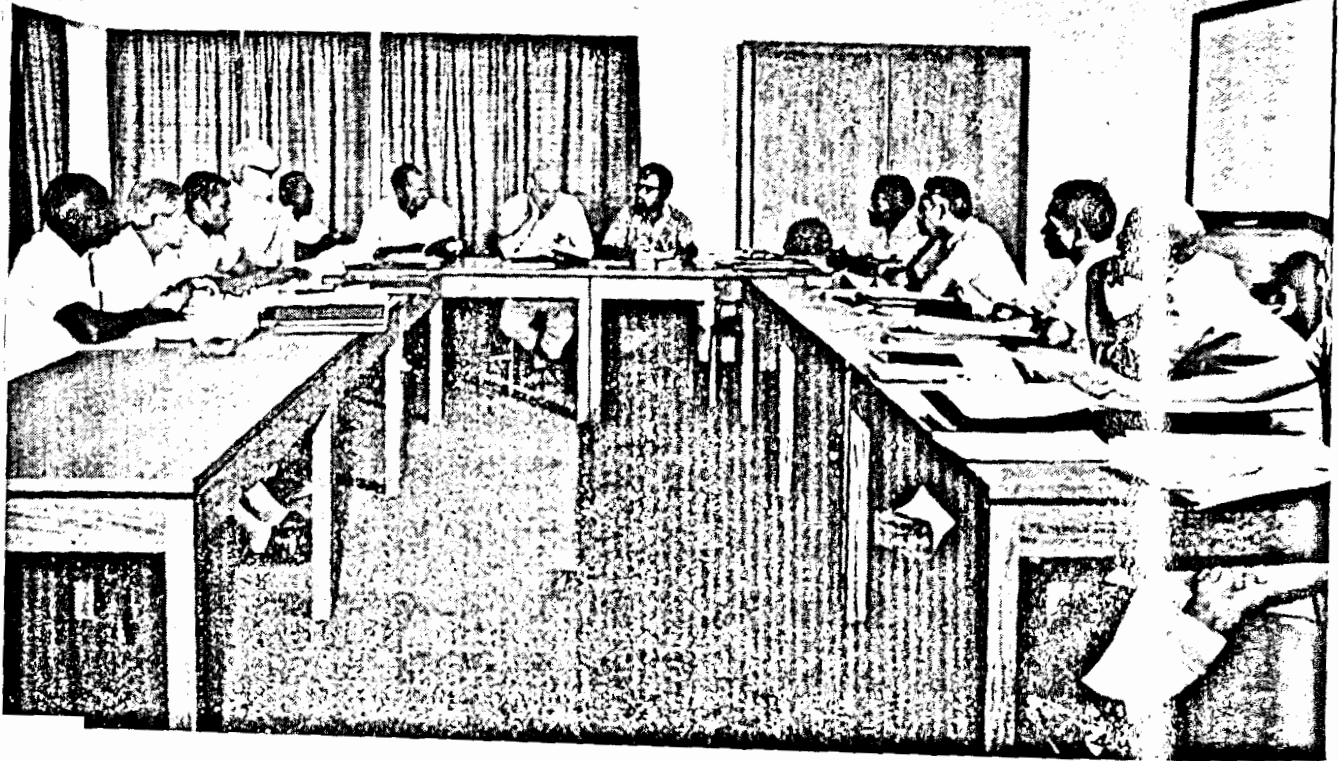


(DIES photo)

*(Above) The United Nations Visiting Mission, watching polling at Kobi and (Below) discussing points with the Chief Electoral Officer, Mr Simon Kaumi. The composition of the Mission was Mr W. Tapley Bennett (United States) Chairman; Mr Mohammad Hakim Aryubi (Afghanistan); Sir Derek Jakeway (United Kingdom); Mr Aleksander Psončak (Yugoslavia).*

(DIES photo)



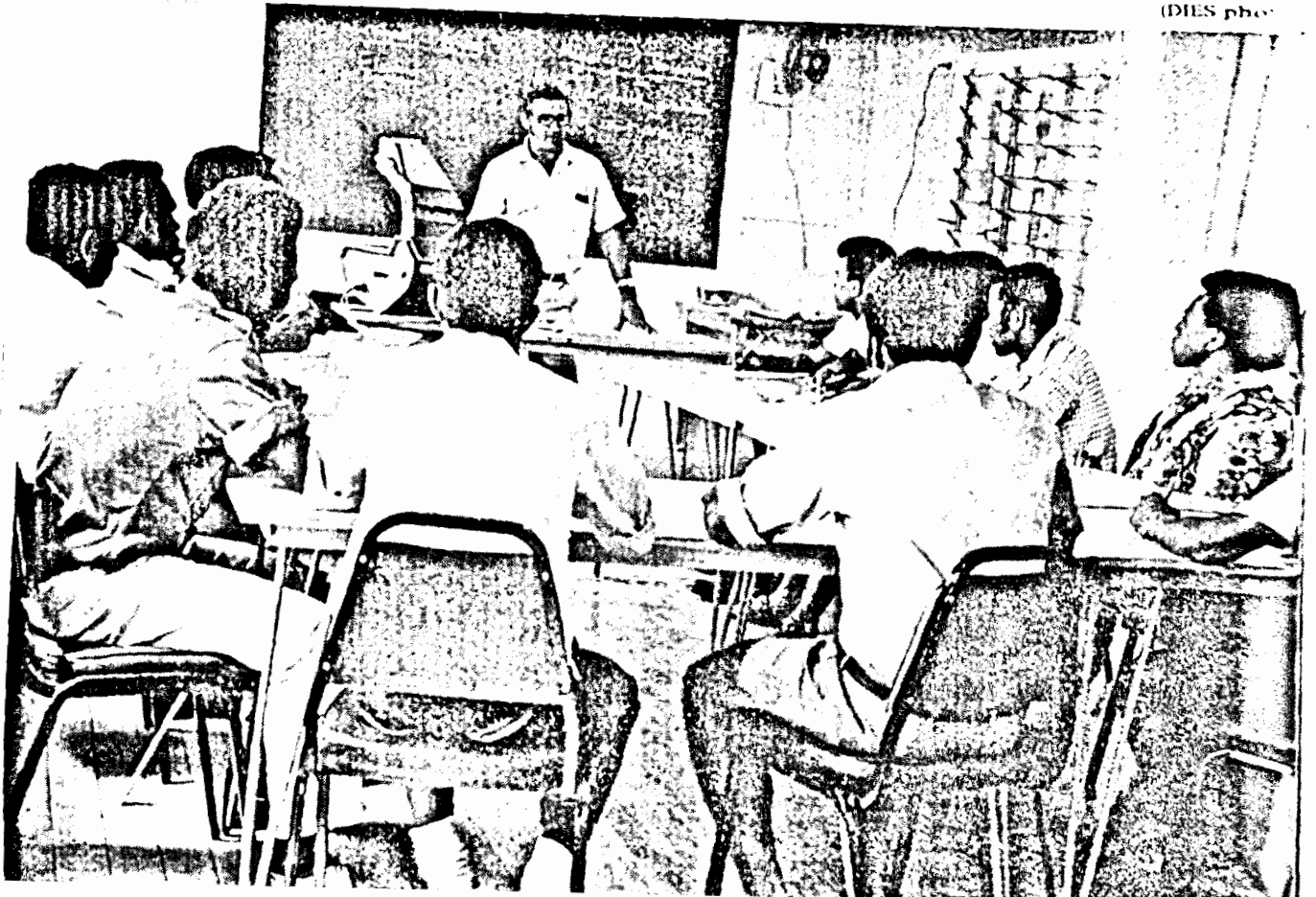


*(Above) The Administrator's Executive Council in session.*

(DET photo)

*(Below) Training session at the Administrative College in Port Moresby.*

(DIES photo)





Dr Reuben Taureka—Minister for Health

Mr Albert Maori Kiki—Minister for Lands and Environment

Mr Donatus Mola—Minister for Business Development

Dr John Guise, CBE—Minister for Interior

Mr Paul Lapun—Minister for Mines

Mr Niwia Ebia Olewale—Minister for Education

Mr Julius Chan—Minister for Internal Finance

Mr Thomas Kavali—Minister for Public Works

#### *Official Members*

Mr Anthony Philip John Newman—Deputy Administrator

Mr Henry Parker Ritchie, CMG—Treasurer

Mr William John Francis Kearney—Secretary for Law.

As a result of Determinations made by the Minister of State for External Territories since August 1970, the authority and responsibility of ministerial office holders has been increased to the point where Ministers exercise final authority and accept full responsibility for certain matters specified by the Minister of State for External Territories under sections 24 and 25 of the Papua New Guinea Act falling within the functions of their respective departments. In respect of non-specified matters within these functions, Ministers are responsible within the broader framework of government policy, for administrative actions of their departments and for the formulation of policy. Ministers are obliged to refer matters to the Council when so directed by it and to give effect to decisions made by the Administrator after receiving the Council's advice. In relation to the specified matters, the Administrator is instructed, by the Governor-General of Australia, under section 15 of the Papua New Guinea Act, to accept the advice of the Council. The result is, that, subject to (i) programmes and policies agreed upon between the Administering Authority and the Papua New Guinea Government, and (ii) lawful agreements entered into by or on behalf of Papua New Guinea, the Council is now the final policy making and executive body for a wide range of government functions. The convention has developed that the Administrator withdraws from the Council when matters subject to final Papua New Guinean decision-making are discussed.

The Act provides that in such cases the Deputy Chairman shall take the chair and it is from this provision, and the fact that the occupant, Mr Michael Somare leads the Coalition Government in the House of Assembly that the position has emerged as that of Chief Minister.

On 20 June 1972 the Administrator, acting under the *Administrative Arrangements (Vesting of Powers) Ordinance* 1971 delegated to Ministers many of his powers and functions in specified areas, with the power to further delegate those powers to subordinate officers. This enables Papua New Guinea Ministers to exercise many of the statutory powers which were previously the Administrator's prerogative. Even in those cases where the powers have been re-delegated to public servants, it is indicative of the change in political emphasis that these powers now derive from elected Papua New Guinea Ministers and no longer from the Administrator, although he holds the right to revoke the initial delegations. In no case has he done so.

#### *Ministers*

The *Papua New Guinea Act 1949-1971* provides for a system of Ministerial Offices as follows:

(i) There shall be such number, being not more than seventeen, of offices of Minister of the House of Assembly as the Minister from time to time determines.

(ii) The ministerial offices shall have such respective designations as the Minister from time to time determines.

(iii) In respect of each ministerial office, the Minister shall determine from time to time, the matters in respect of which the holder of the office is to perform the functions of a Minister of the House of Assembly.

(iv) Without limiting the generality of the last preceding sub-section, the matters that may be determined by the Minister under that sub-section in relation to a ministerial office may include all or any of the matters to which the functions of a specified department of the Public Service relate.

At the first meeting of the current House in 1972, in accordance with regulations, a Ministerial Nominations Committee of 7 members was appointed. This Committee after consultation with the Administrator submitted an agreed list of names to the House

of Assembly which accepted the list of nominated names. In April 1972 the Minister of State for External Territories announced the allocation of portfolios among the Ministers, and the membership of the Administrator's Executive Council.

Ministerial office holders and their portfolios at 30 June 1972 were as follows:

Mr Michael Thomas Somare—Chief Minister  
Mr Iambakey Palma Okuk—Agriculture, Stock and Fisheries  
Dr Reuben Taureka—Health  
Mr Albert Maori Kiki—Lands and Environment  
Mr Donatus Mola—Business Development  
Dr John Guise, CBE—Interior  
Mr Paul Lapun—Mines  
Mr Niwia Ebia Olewale—Education  
Mr Julius Chan—Internal Finance  
Mr Thomas Kavali—Works  
Mr Sasakila Moses—Forests  
Mr Paulus Arek—Information  
Mr Gavera Rea—Labour  
Mr Boyami Sali—Local Government  
Mr Kaibelt Diria—Posts and Telegraphs  
Mr John Baptist Poe—Trade and Industry  
Mr Bruce Reginald Jephcott—Transport.

The functions of a Minister of the House of Assembly are defined, by section 25 of Papua New Guinea Act in relation to matters for which he has final decision-making power, as assisting in the administration of the government of Papua New Guinea and, in particular—

- (a) to take part in the formulation of policies and plans, and of proposals for expenditure, in relation to those matters;
- (b) to make recommendations to the Council in relation to those matters;
- (c) where any of those matters are dealt with by a department of the Public Service—to take part in the direction of the activities of that department relating to those matters; and
- (d) to represent the Administration in the House of Assembly.

The Act further provides in section 25 (2) that:

Powers, functions or duties in relation to the government of Papua New Guinea shall not be conferred or imposed by ordinance on a Minister of the House of Assembly in his capacity as such a Minister.

but this sub-section does not operate so as to prevent the delegation to such a Minister of powers or functions under an ordinance.

Previous arrangements approved by the Minister of State for External Territories allowed Ministerial Members to exercise responsibility jointly with the Departmental Head. Arrangements made under section 25 of the Papua New Guinea Act were varied in August and December 1970, February 1971 and April 1972 and now allow for fuller exercise of power and outline the responsibilities of Ministers in connection with their departments, the Administrators Executive Council, and the House of Assembly, as follows:

#### A. Responsibilities in connection with the Department

(1) In accordance with the Governor-General's instructions given to the Administrator, pursuant to the powers conferred by Section 15 of the *Papua New Guinea Act 1949-71*, a Minister shall exercise full authority, and accept full responsibility, in relation to the matters specified for the respective designations. In so doing a Minister shall not act inconsistently with—

(a) the programmes and policies of development from time to time agreed upon by the Commonwealth of Australia and the House of Assembly or the Administrator's Executive Council, as the case may be; or

(b) any lawful agreement or obligation entered into by the Administration of Papua New Guinea or by the Commonwealth of Australia in respect to Papua New Guinea.

(2) In respect of those matters not specified (i.e., matters which the Australian Government retains), a Minister shall—

(a) be responsible within the framework of broader government policy for decisions regarding policy and for administrative actions of the department, or part of the department as may be determined, in its day-to-day activities other than aspects which are concerned with Public Service matters, terms and conditions of service.

(b) be responsible for the formulation of plans and proposals for departmental expenditure (or part of the department as may be determined), including the

formulation of draft departmental estimates.

(3) In carrying out his functions, a Minister shall—

(a) refer policy decisions or other matters to the Administrator's Executive Council where

(i) he considers it necessary to do so; or

(ii) the Administrator's Executive Council or the Administrator so directs;

(b) consider papers and recommendations submitted to him by the department and his decisions shall be recorded in writing and shall be retained as part of the records of the department;

(c) receive advice in all matters relating to the exercise of his functions from the departmental head of the relevant department who is responsible for the general working of that department.

#### B. Responsibilities in connection with the Administrator's Executive Council

(1) Except as may be otherwise arranged in any particular instance a Minister shall in relation to matters within his competence—

(a) introduce submissions into the Council including proposals for legislation;

(b) present draft estimates of annual expenditure;

(c) give effect to decisions made by the Minister for External Territories or the Administrator after consideration of the advice of the Administrator's Executive Council;

(2) A Minister appointed to the Administrator's Executive Council shall participate in the general functioning of the Council under section 19 of the Act.

(3) A Minister not appointed to the Administrator's Executive Council may, with the agreement of the person for the time being presiding at a meeting of the Administrator's Executive Council attend that meeting of the Council when matters in respect of which he is performing the functions of a Minister are under discussion, and may be heard at the meeting.

#### C. Responsibilities in connection with the House of Assembly

A Minister shall generally be responsible in the House of Assembly for matters within his competence and in particular—

(a) he shall answer questions and make official statements concerning those matters and by arrangement other matters; and

(b) he shall introduce legislation concerning those matters and by arrangement other matters, being legislation approved by the Administrator's Executive Council or the Minister for External Territories as the case may be, and shall guide the legislation through proceedings in the House.

In addition to the foregoing in the performance of their functions under section 25 of the Act, Ministers should conform with the accepted code of conduct applicable to holders of ministerial office. They should also respect the convention that they will not publicly oppose decisions of the Administrator's Executive Council.

#### *Further Constitutional Development*

As reported in the 1970-1971 Annual Report, the Administering Authority accepted the recommendations of the Select Committee on Constitutional Development endorsed by the House of Assembly. Amendments to the Papua New Guinea Act gave effect to the recommendations to increase the number of electorates in time to allow electoral redistribution before the 1972 general elections.

A further amendment to the Papua New Guinea Act assented to on 13 December 1971, gave effect to the remaining recommendations of the Select Committee, accepted by the House of Assembly and endorsed by the Administering Authority. It also provided for the 2 Territories to be called officially 'Papua New Guinea' which name was adopted by the House of Assembly in preference to 'Nuigini' which the Select Committee recommended. The Act provided for the replacement of the Ministerial Members system by up to 17 offices of full Minister. Up to 3 nominated members were provided for, along with eligibility conditions for these, and the number of official members of the House of Assembly was reduced from 10 to 4. The Act also included provision for the changed composition of the Administrator's Executive Council, the position of Deputy Chairman of the Administrator's Executive Council, and the allocation of portfolios to Ministers. Finally it



validated the *National Identity Ordinance* 1971 which provided for the name, national emblem and flag of Papua New Guinea.

Following the general elections in February/March 1972, the new House of Assembly met on 20 April under the leadership of a National Coalition Government led by the Parliamentary leader of the Pangu Party, Mr Michael Somare. The National Coalition commands a majority in the House, and consists of the Pangu Party, the People's Progress Party, the New Guinea National Party, the Mataungan Association, and a number of Independents. Mr Somare was elected Deputy Chairman of the Administrator's Executive Council by his Ministerial colleagues.

*Constitutional Planning Committee.* On 23 June 1972 Mr Somare, in a statement to the House announced the establishment of a Constitutional Planning Committee, made up of members of the House representative of the various regions of the country, and of political parties and groups in the House. The following composition was proposed:

Chairman (ex-officio)—Mr Michael Somare  
Previous Chairman of Constitutional Select Committees—Dr John Guise and Mr Paulus Arek

Pangu Pati—3 members including Father John Momis (Deputy Chairman)  
People's Progress Party—1 member  
National Party—1 member  
Mataungan Association—1 member  
United Party—5 members  
Independents—1 member

Following United Party criticism in the House of Assembly that the proposed committee was unbalanced so far as party representation was concerned, the Chief Minister, on 27 June, moved an amendment to his motion to take note of his Constitutional Planning Committee paper by eliminating the one independent member and increasing United Party representation from 5 to 6. Further, he emphasised that he would want all constitutional proposals to be accepted by a substantial majority.

It was proposed that the terms of reference of the Committee be:

'To make recommendations for a Constitution for full internal self-government in a united Papua New Guinea with a view to eventual independence.'

Without limiting the power of the Committee to make any investigation or recommendation

which it deems relevant to this objective, matters to be considered by the Committee for possible incorporation into the Constitution or related documents should include the following—

- (a) the system of government: Executive, Legislature and Judiciary;
- (b) central-regional-local government relations and district administration;
- (c) relations with Australia;
- (d) defence and external affairs (transitional provisions);
- (e) the machinery of government—control, organisation and structure of the Public Service;
- (f) a Director of Public Prosecutions and the Public Solicitor;
- (g) an ombudsman and tribunals of administrative review;
- (h) protection of minority rights;
- (i) a Bill of Rights;
- (j) emergency powers;
- (k) citizenship;
- (l) procedure for amendment of the Constitution;
- (m) judicial review (the power of a Court to decide whether or not any action by the Government or law passed by Parliament is in accordance with the Constitution).

In addition the Chief Minister proposed that the Committee should be asked to consider the mechanism for implementing the Constitution including the possibility of holding a Constitutional Convention and to make recommendations.

It was proposed that the Committee be served by its own executive, legal, secretarial and consultant staff, all of whom will be responsible solely to the Committee. Staff were to be appointed by the Administrator on the recommendation of the Administrator's Executive Council. It was proposed that in recommending people for staff positions, regard would be given not only to their professional competence and experience, but particularly to their commitment to the concept of a distinctively Papua New Guinean Constitution. They would be people who saw their task as assisting the Committee to give concrete expression to its members' ideas.

It was proposed that the Committee would invite submissions from all interested persons and organisations throughout the country, and release completed parts of its proposal in order to test public reaction and to promote interest in its work. The Committee should

visit every district to consult fully with district representatives, especially on central-regional-local government relations, and on any major changes to the system of government which may be recommended. It was also proposed that the political education section of the Administrator's Department should widely publicise the work of the Committee and its recommendations with a view to encouraging the widest possible public discussion.

Stemming also from the recommendations of the Select Committee on Constitutional Development, and announced by the Minister of State for External Territories in April 1971, a programme was prepared by the Administering Authority in conjunction with the Papua New Guinea Government, setting out the legislative and administrative steps necessary to achieve self-government. This programme was based on a target date of mid-1975, however on 27 June 1972 Mr Somare announced his government's view that self-government should not occur before 1 December 1973 but that it should come as soon as possible after that. Debate on the timing of self-government was adjourned until the August-September meeting of the House when it was subsequently approved.

Ministerial discussions between the Papua New Guinea Government and the Administering Authority were planned for July/August 1972 in order to discuss further constitutional developments and the steps necessary to achieve these.

#### *Political Education*

*Background.* The Political Education Committee, an advisory body on policy matters which meets every month, has representatives of the Departments of the Administrator, Education, Information and Extension Services, and Social Development and Home Affairs. The Committee also seeks advice from various people outside the Papua New Guinea Government, for example, the University of Papua New Guinea. Field activities are organised and co-ordinated by Political Education officers in each district.

*Intensified Programme.* In May 1972, the Chief Minister announced his Government's plans to intensify political education programmes throughout Papua New Guinea, in response to widespread and repeated requests for political education by village people, local government councils, members of the House of Assembly and the United Nations.

The programme will have 3 main aims:

- (i) to explain how Papua New Guinea's political systems work;
- (ii) to show how these systems may be made to respond democratically to the will of the people; and
- (iii) to promote the cause of national unity.

*Goroka Pilot Project.* The methods and aims used for the intensified programme will be determined by the results of the 2 six-month Political Education Pilot Projects, which began in Goroka in May 1972. This is an experimental project which is designed to explore various techniques and approaches that could be incorporated in a national political education programme. The project has a broad base and is co-ordinated locally by a committee consisting of the District Commissioner, the District Political Education Officer and representatives of a number of Administration departments and educational institutions.

Generally speaking the programme that has been adopted is as follows:

- (a) Monthly seminars for village and town opinion leaders.
- (b) Informal contact with village discussion groups by High School students, headmaster trainees at the Goroka Teachers' College, students of the University of Papua New Guinea, patrol officers and councillors.
- (c) Additional communication through various media, printed material, radio, films, film strips and posters.
- (d) The programme was loosely structured over the 6 months period with monthly phases as follows:
  - (i) Introduction to Government.
  - (ii) The legislature and the Administrator's Executive Council.
  - (iii) Political Parties.
  - (iv) The Judiciary.
  - (v) The Public Service.
  - (vi) Towards National Unity.

Even though the project and the evaluation are incomplete there are clear indications that the approach adopted can with modifications, be the blueprint for a national campaign. A political education officer co-ordinating the activities of a number of different agencies through a committee has been shown to be feasible, and the more successful of the approaches are already becoming obvious.

Future plans for the expansion of the political education programme are heavily based upon the experience gained in the Goroka project.

*Projected Immediate Programme. (a) Step 1. Establish a headquarter's branch within the Office of the Chief Minister with responsibility for planning implementing and co-ordinating the programme.*

One of the main activities of the programme will be the transmission of information through the communication network and so it is clear that the selection of this information, and its presentation in meaningful, attractive and interesting terms will require a carefully selected *planning and production* team which will be kept fully occupied by the volume of material they will be expected to produce. High quality printed material, posters, radio programmes, visual aids, film strips and other necessary content of the programme will be produced mainly by this body but the local production of materials at district level would also be encouraged.

Once the material has been prepared it is essential that it gets into the right hands in the right way as quickly as possible which will require an efficient headquarters administrative team.

*(b) Step 2. Create a Political Education National Advisory Committee.*

This Committee should have two representatives of the Political Development Division, a government representative and a representative of the major opposition party in the House of Assembly, and representatives of involved departments and organisations. It should meet bi-monthly and have the power to co-opt representatives whom it considered suitable.

The National Advisory Committee's function would be to advise on policy and to keep departments and organisations informed of policy decisions. It would also work towards committing government departments to policy decisions relating to the political education programme.

*(c) Step 3. To set up field staff who could establish District Co-ordinating Committees working under the Chairmanship of the District Commissioner.*

These Committees would advise on the programme at the local level, enlist the support of all interested agencies in the District

and facilitate the opening of channels of communication through to village level.

In the field, although it is hoped to use the existing field networks of other departments, councils and missions, together with students, the tasks of reaching the district as a whole, co-ordinating the various groups involved preparing local material and ensuring constant and accurate feedback of public reaction and opinion, would require at the minimum in the more heavily populated regions, a district establishment of 3 field officers and 1 clerk typist.

## CHAPTER 3

### LOCAL GOVERNMENT COUNCILS

Local government in Papua New Guinea functions within the general political structure are described in Chapter 1 of this Part. The first councils were established in 1950. By 30 June 1951, there were 5 councils in Papua New Guinea with 89 elected representatives for areas with a total estimated population of 17,500. Since then there has been significant extension of local government with particularly rapid growth in the 5 years ended 30 June 1968.

#### *Ministerial Responsibility*

During the year under review the Papua New Guinea Minister exercised full authority and final responsibility in respect of rural and urban local government, local government elections, training for local government, supervision of the local government service and grants to local government councils. The Administering Authority retained responsibility for Area Authorities.

In the Second House of Assembly the Assistant Ministerial Member for Local Government was Mr Kaibelt Diria, MHA. In the Third House, the Minister for Local Government is Mr Boyamo Sali, MHA.

#### *Legislation*

The following list of legislation is currently administered by the Minister through the Office of Local Government:

*Local Government Ordinance 1963-1971.*

*Arawa Township Development Ordinance 1970-1971.*

*Dog Ordinance 1966 (jointly).*

*Police Offences (Rubbish Dumping) Ordinance 1969. (jointly).*

*Local Government Service Ordinance 1971.*

*Cities Ordinance 1971.*

*Trading with Natives Ordinance 1946-1953* (jointly).

*Licences (New Guinea) Ordinance 1952* (jointly).

*Local Government Regulations 1964* (as amended to date).

*Local Government (Council Staff) Regulations 1964.*

*Local Government (Electoral Provisions) Regulations 1970.*

The Minister for Local Government also has final responsibility for the *Koki Market Place Trust Ordinance 1969.*

The Office of Local Government was formed as a unit separate from the Division of District Administration in March 1971. The separation to date has proved successful and beneficial. Administrative Advisers are now responsible to the District Local Government Officers who are in turn responsible to the Regional Local Government Officers. In isolated cases there exist situations where the general field officer of the Division of District Administration has a dual role in that he is also a council's Administrative Adviser. Additionally many officers of that Division continue as policy advisers to councils. Specialist advisers from other departments continue to provide the very necessary expertise required as councils extend and increase their activities and services.

#### *Establishment of Councils*

Five new councils were established in Papua New Guinea during the year. In addition a number of councils extended their boundaries to include additional villages and small towns.

In Papua New Guinea 136 of the 158 councils now include alienated as well as native owned land and have people resident on such land. It is hoped that the remaining councils will soon seek to be reconstituted to include within their jurisdiction all classes of land holdings and all inhabitants living in the locality as fully integrated local governing bodies.

The estimated percentage of the total population of Papua New Guinea embraced by the local government system at 30 June 1972 was 91.85 per cent.

The possibility of further extension of the system is limited as many of the areas

remaining outside local government are sparsely populated and there are difficulties in communication and development.

Further information concerning the number of local government councils in each District of Papua New Guinea, tax rates declared by councils under their rules, the analysis of receipts and expenditure by councils and local government council voting statistics are set out in the appropriate tables of Appendix II.

During the year local opposition to the Gazelle Peninsula Local Government Council increased mainly because of political differences among the Tolai people which of local government councils in each district remain unresolved. The term of office of all councillors, which was due to expire on 12 June 1971 was extended to 12 June 1972 because it appeared impossible to conduct elections in which all sections of the Tolai people would participate.

The local government legislation would not allow extension of the term of office of councillors for more than 12 months and consequently a decision as to the future of the Gazelle Peninsula Council had to be made before 12 June 1972. The Commissioner for Local Government in accordance with directions of the Administrator's Executive Council suspended the Council on 8 June 1972 and appointed a Board of Management representative of both the Council and other factional interests. As at 30 June 1972 the representatives of opposition groups had refused to take their place on the Board.

#### *Urban Local Government*

Four urban Councils were proclaimed in 1971. Elections for the Port Moresby, Lae and Madang Town Councils were held on 3 April 1971. Elections for the Rabaul Town Council were held on 23 October 1971.

The *Cities Ordinance 1971* came into effect on 23 March 1971, and in that Ordinance the Port Moresby City Council has been accorded that title and a flag and emblem have been bestowed on the Council. A set of regulations allowing for the creation of the position of Lord Mayor has also come into effect.

An Accounting Adviser for Urban Councils commenced duty with the Government during December of 1971 and he is advising the various urban Councils on a financial system suited to their individual requirements.

During the initial months of their existence the 4 urban councils are operating on Government supplied establishment and bridging finance grants.

It is anticipated that the medium size towns of Goroka, Mount Hagen, Kundiawa and Wewak will be incorporated into the Urban Local Government scheme for rating and other purposes during 1972-73 financial year.

#### *Arawa Municipal Commission*

The Arawa Municipal Commission was established under the *Arawa Township Development Ordinance 1970-1971*, to have and to exercise in the town of Arawa in the Bougainville District, the powers, functions, duties and responsibilities of a local government council for at least 3 years from 10 December 1970, with provision for extension beyond that period by resolution of the House of Assembly during the 6 months prior to 9 December 1973.

The initial membership of the Commission consists of 4 commissioners appointed by the Administrator. One of these is appointed from among persons living in the town and he is to be replaced after 30 June 1972 by a commissioner elected by all persons ordinarily resident in the town.

#### *Functions and Constitution of Councils*

Under the *Local Government Ordinance 1963-1971*, the Administrator-in-Council may establish by proclamation local government councils which have authority, subject to the laws of Papua New Guinea, in defined areas to:

- (i) control, manage, and administer the council area, and ensure the welfare of the council area and the persons therein;
- (ii) organise, finance, or engage in any business or enterprise;
- (iii) carry out any works for the benefit of the community; and
- (iv) provide, or co-operate in providing, any public or social service.

A council may also act as agent and perform and do such matters and things as are agreed upon on behalf of the Papua New Guinea Government, an agency or instrumentality of the Papua New Guinea Government, another council or any other public body or institution, on agreed terms and conditions.

To enable them to perform these functions each council has the power to make rules, including rules imposing personal taxes, and,

in declared urban areas within its boundaries, rates on other than unalienated or Government occupied land, and taxes on buildings on native land or on Government land occupied by a person other than the Government or Administering Authority or an authority or instrumentality of the Administering Authority. Rules must be published in the Local Government Gazette, and laid before the House of Assembly on the first sitting day of the House after the making of a rule, and be forwarded immediately to the Commissioner for Local Government. A rule may be disallowed by a resolution of the House of Assembly or by the Commissioner. If the Commissioner disallows a rule in whole or in part, or recommends amendments to a rule, he must immediately provide a statement of the reasons for the disallowance or the amendments to be laid before the House of Assembly. Rules which have not been disallowed have the full force of law.

The areas covered by the Port Moresby, Lae, Madang and Rabaul Councils have been declared urban areas for the purposes of rating and taxing land and buildings. Valuation Rolls have been completed for Port Moresby, Lae and Madang. The Roll for Rabaul is expected to be available in November 1972.

At 30 June 1972 no urban local government council had levied rates or taxes on land and buildings.

Model rules are published in the Local Government Gazette. The Local Government Office has the full-time services of a Legal Adviser from the Department of Law in the drafting of rules and other legal matters arising in the field of local government.

It is an offence for any person to prejudice the free and effective exercise of the lawful power and authority of a council.

The Administrator-in-Council, either by the proclamation establishing a council or by a subsequent proclamation, may make provision for the manner in which a council is to be constituted, for the wards into which a council area is to be divided, and for the manner of election to a council. It is usual to provide that should a ward refuse or fail to elect a councillor, the Commissioner for Local Government may either issue a writ for a by-election or nominate a person to be a councillor for that ward, and such a person shall be deemed to have been elected.

Any person who is not less than 18 years of age and who is resident in a council area is entitled to stand as a candidate for election. This year again saw women councillors: 10 were elected—one in each of Bougainville, Eastern Highlands, East Sepik, Gulf, Madang and New Ireland Districts and 2 each in the Central and Milne Bay Districts.

Tenure of office of councillors after the initial elections is for 12 months, after which elections are held every 2 years, or every 3 years where this is provided for in the proclamation establishing the council.

The qualifications for voters and the method of voting are described below in Chapter 5 of this Part.

The returning officer for an election for a local government council is appointed by the Chief Electoral Officer of Papua New Guinea. After the returning officer has declared the result of an election the Chief Electoral Officer publishes the names of successful candidates in the Local Government Gazette.

A member of the Council may be dismissed from office by the Commissioner for Local Government, but only after due inquiry has been made and proper precautions have been observed to protect the individual.

During the year no councillors were dismissed; however 21 councillors were deemed to have vacated their offices, in each case the reason being non-attendance at 3 consecutive meetings without the consent of the council.

Council presidents and vice-presidents are elected by secret ballot of the incoming council from their own number.

Council members are paid allowances from council revenue, the amounts being fixed by councillors when drawing up the annual estimates. The annual appropriation for personal allowances for members may not exceed 15 per cent of the total estimated recurrent revenue of the council without the written approval of the Commissioner for Local Government. These allowances are not a salary, but rather a reimbursement for out-of-pocket expenses incurred by members when engaged on council business. Most councils also vote a small sum annually as a special allowance to the members of their executive and finance committees.

Finance and executive committees composed of varying numbers of councillors, and usually including the president and vice-president, are appointed to prepare and subsequently to supervise a works programme, to

organise festivities and sports days, to watch over the care and maintenance of council transport, to consider more important correspondence and to perform other similar functions.

#### *Finance*

Each council obtains most of its recurrent revenue from a personal tax collected and taken into account by the council in accordance with the Local Government Ordinance. Revenue is expended by the council in accordance with its certified annual estimates and no part of it goes to the Papua New Guinea Government unless indirectly through council financial assistance for education, health and library services.

Councils base their financial operations on a twelve month period 1 July to 30 June.

Councils may impose rates, taxes and fees in respect of any of the matters coming within the scope of their powers. A local government council tax review committee may grant an exemption from, or reduction of, council tax on grounds of hardship or lack of sufficient means, or may on any grounds reduce the amount of rates and taxes payable by a person to such amount as, to it, seems proper. A person may appeal against a decision of a Tax Review Committee before a Tax Appeal Tribunal which consists of a Magistrate of the District Court.

Beginning in January each year, every council holds a series of meetings to determine tax rates and to prepare annual estimates for the next financial year beginning on 1 July. Such meetings are attended by representatives of various Government Departments concerned with local services. In the light of all relevant circumstances, and with the approval of the Commissioner for Local Government, each council then passes a rule fixing taxation rates for the ensuing year, and then makes a more precise estimate of the total revenue it can expect to receive. When the revenue figure has been estimated and the carry-over figure calculated, every item of expenditure, whether recurrent or capital, is decided by the full council, all major items being voted on separately. Finally the estimates are approved by formal motion and forwarded to the Commissioner for Local Government for certification that funds are likely to be available to meet the proposed programme.

Council members and electors take a keen interest in the financial affairs of their council.

To a growing extent councils are being regarded as the medium through which local preferences are expressed.

Councils in low-income areas are given direct subsidies to enable them to become established and to operate until their own revenue can pay for their recurrent expenditure. Councils may progressively assume responsibility for local public health services (including measures of hygiene such as sanitation and the improvement of water supplies). In order that this process may take place in a sound and uniform manner a system of grants-in-aid operates whereby the financial contribution to health services made by any particular council depends on the stage of development it has reached. Councils have been graded, according to their ability to pay for health services, into 4 categories designated Stage 0, Stage 1, Stage 2 and Stage 3. The 'Stage 0' council makes no contribution for salaries of medical workers or cost of drugs and dressings. In addition, approved environmental sanitation projects are paid for by the Government but the council provides all buildings for health work and is responsible for construction and maintenance. The scheme provides that councils included in higher categories make progressively greater proportional contributions until at Stage 3 a council would provide 75 per cent of the salaries of rural medical workers employed in its area, 50 per cent of the cost of drugs and dressings used, 50 per cent of the cost of approved environmental sanitation and 100 per cent of the cost of buildings. There are, as yet, no 'Stage 3' councils in Papua New Guinea.

The Department of Education assists to a limited extent with a building subsidies scheme for the construction of classrooms and teachers' residences by local government councils. Where councils are subsidised for these building projects, subsidies of up to \$700 may be paid. The purchase of radio sets by councils for village distribution is subsidised by the refund of customs duty and freight charges.

An increasing number of councils is entering into agreements with the government to maintain airfields and main roads in their area. Payments under these agreements are estimated at a rate to cover all the operating and capital equipment costs involved, and this gives the councils the opportunity to purchase vehicles and roadmaking equipment necessary to fulfil the terms of the agreements. This equipment is also utilised on other council projects in

idle time. By this means access and village roads have been constructed or extended, thus increasing the infrastructure essential to economic development.

A further contribution by councils to the growth of the infrastructure derives from their participation in rural development projects. After consultation with councils the government, working through District Co-ordinating Committees, decides which development projects proposed by councils should be subsidised by rural development funds. Councils usually provide at least 50 per cent of the cost of the projects in their areas in cash or kind, the balance of the cost in cash or materials being supplied from the Rural Development Fund.

#### *Council Activities*

Councils erect schools and classrooms, and some have built dormitories for children whose homes are not within walking distance of a school. Others have constructed buildings from local materials for community vocational schools which are staffed and conducted by the Department of Education. These vocational schools teach basic carpentry and the simpler technical skills appropriate to village needs. In several areas this local training has provided the semi-skilled workers and contractors whom councils require for their building projects and to operate and maintain equipment such as trucks. As living standards rise in the villages so does the need increase for men with some knowledge of carpentry and mechanical maintenance to assist in building houses, and in servicing bicycles, trucks, outboard motors and other equipment purchased by the villagers.

A number of councils have co-operated with the Public Health Department in establishing rural health centres staffed by Papua New Guinean medical officers and other trained staff. (See Chapter 7 of Part VII of this Report). Centres of this kind have proved to be useful means of providing day-to-day health care for residents of the council area. Since the people as taxpayers are directly interested in the centres, these centres quickly become a part of community life and the people more readily adopt general health practices in the village and the home.

Other community services organised and financed by councils include the provision of village water supplies by the construction of roof catchments, concrete wells or windmills and the making of side roads to open up isolated localities for cash cropping. These

roads are made at little cost by the voluntary labour of the local people using council trucks and equipment. Council transport is also hired out to move produce and supplies between the villages and market outlets.

Some councils have undertaken various forms of economic activity to develop their own areas. The Tolai Cocoa Project of the Gazelle Peninsula Council as described in earlier reports is one such activity. During the year ended 30 June 1971 the Tolai Cocoa Project made a profit as throughput increased from 32 per cent of native-produced cocoa in 1969-70 to 37 per cent. However, for various reasons including opposition to the Project by local political factions, throughput dropped during the year ended 30 June 1972 to approximately 24 per cent. The Project requires a throughput of at least 35 per cent to remain viable.

During the year the Project has been managed for the Gazelle Peninsula Local Government Council by the New Guinea Islands Produce Company under a Management Agreement entered into on 30 April 1971. A condition of that Agreement was that the Company could at any time call on the council to transfer to it all assets and liabilities in the Project for five (5) dollars. The transfer has not been possible because of legal difficulties with regard to transferring the leases to the land on which the fermentaries are built.

The Company revoked the Agreement as at 30 June 1972 and as at that date all the assets and liabilities of the Project were frozen. The future of the Project is inextricably tied up with the future of the council and will depend on a decision yet to be made by the Administrator's Executive Council.

Other ventures being undertaken by councils include village cattle projects, town markets, brick factories and wholesale bulk stores supplying goods to village storekeepers. Hostels have been established by a number of councils, whilst others have established shipping and road transport services for goods and produce.

Councils are active in the cultural field: they sponsor exhibitions of traditional arts and crafts, encourage participation in choral competitions and in district agricultural shows, help to finance film shows, donate school prizes, promote women's clubs and engage in the business of buying and selling local artefacts. Cottage industries such as weaving and pottery making have been actively supported.

Councils continue to show interest in the youth in their areas and a number employ youth workers trained by the central administration. The training continues to include some emphasis on practical handyman skills in addition to instruction in youth and group work. An important innovation is that the nature of the training is now oriented on a regional or district basis with the object of providing instruction in knowledge and skills particularly relevant to the area in which the employing council is situated. Courses for council sponsored trainees are now, therefore, generally more specialised and more closely related to the area.

Trainees are selected by local government councils. After completing the course, they are employed by the council which selected them, to help with the problems affecting young people in its area. Trainees are taught how to establish playing fields, to organise games and clubs and to undertake health education in villages. The revised training course is designed to make youth workers generally more valuable in the council's community development activities. The central government pays all training expenses and the local government councils employ the trainees as full-time youth workers when they have completed training.

Councils and members of the House of Assembly maintain close contact. This is a valuable means whereby members of the House are kept informed of public opinion in council areas, whilst villagers are able to learn about the work of the House of Assembly and the way it is dealing with matters of direct and indirect concern to them.

Conferences of representatives of each local government council in a district are now held biannually in each district. The District Conferences elect the district delegate to the meetings of the Local Government Association.

Two political education tours to Australia for selected groups of local government councillors were organised during the year. The first was in September-October 1971 and the second in March 1972. The groups toured rural New South Wales for three weeks, visiting rural industries and rural councils, as well as spending several days in Canberra to observe the Australian Parliament.

#### *Training*

Formal training in local government matters is provided by the Office of Local Government field staff and regional training officers.



Courses for Papua New Guinean leaders and elected councillors are held at various locations and the duration of such courses varies from 3 to 10 days. These courses cover instruction on the principles of local government, rule making, the relationship between councils and the central government, and the functions and responsibilities of a council.

The Local Government Staff College at Vunadidir near Rabaul provides formal training for Local Government Officers and Assistant Finance Officers—who are Public Servants—and for Council Officers who, when they graduate, are employed by individual councils.

Courses for Local Government Officers extend over one year and courses for Assistant Finance Officers extend over a 2 year period. Subjects covered in both these courses include Local Government, English, Political Science, Accounting, Public Administration, Law and Economics. At the successful conclusion of these courses officers are then posted to positions in the field where they gain further on-the-job training under the guidance of senior officers.

In addition to the above formal training courses, there is a large Local Government component in the induction courses organised for all newly appointed field staff of the Department of the Administrator. After a period of on-the-job training in the field, these officers later undergo an advanced training course in which the Local Government Section comprises approximately 40 per cent of the total course.

Local Government staff comprising local officers of the Public Service are currently attending the following courses:

#### *Administrative College*

- Diploma Course—2nd year—2 officers.
- Diploma Course—1st year—1 officer.
- Higher Public Service Certificate Course—12 trainee Local Government Officers.

#### *Australian School of Pacific Administration*

- Higher Public Service Certificate Course—3 officers.
- Public Service Certificate Course—3 officers.

In addition 3 Local Government Assistants recently completed a 2 months practical training course with councils in New South Wales.

Localisation of positions at the higher executive level is being undertaken and 2 local officers have been given the powers of Deputy Commissioners for Local Government under Section 9 of the Ordinance. One is stationed at Madang—New Guinea Mainland Region and the second at Port Moresby—Papuan Region. They are being trained to perform the duties of a Regional Local Government Officer.

There is now a total of 25 local officers employed in various field positions within the Office of Local Government advising and assisting councils in the performance of their functions. A further 10 are undergoing an initial course of training at the Local Government Staff College, Vunadidir.

Additionally 18 local field staff of the Division of District Administration have been appointed as Advisers under section 10 of the ordinance.

#### *Local Government Service*

A Local Government Service is being established as a career service for selected suitable categories of Local Government Council staff.

The *Local Government Service Ordinance* 1971 was passed by the House of Assembly in June 1971 and brought into operation on 1 October 1971. The Local Government Service Commission was appointed by the Administrator-in-Council on 3 February 1972, and the Secretariat for the Commission was staffed with an Executive Officer and a Clerk.

Action is in hand for the making of determinations governing terms and conditions of employment as a prerequisite to the establishment of the Local Government Service.

#### *The Local Government Association*

The Local Government Association was formed in 1968 with the adoption in April of that year of a constitution establishing the Association as an independent organisation, incorporated as a representative body for local government councils in Papua New Guinea. All councils are members of the Association and contribute bank interest accrued on reserve accounts towards its annual costs.

The Association's aims include:

- watching over and protecting the interests, rights and privileges of member councils;

- to plan and participate in an employees' pension scheme amongst member councils; and
- to establish links with similar organisations in Australia and elsewhere.

Meetings of the association enable councils to raise for discussion and broad appraisal by council representatives from all districts proposals of interest likely to affect or involve the general operation of the local government system.

Conferences of the association are held annually, the fifth being held in August 1971. The Executive Committee of the Association met on a number of occasions during the year.

The sixth Conference is to be held in August 1972.

#### *Local Government Authorities*

Amendments to the Local Government Ordinance in May 1971 made provision for Local Government Authorities with defined powers and functions and comprised mainly of representatives from member councils. Local Government Authorities can be either Area Authorities covering a whole district, upon which powers could be devolved to promote varying degrees of local autonomy based on local needs and desires, or Special Purposes Authorities for the exercise of specific council powers on a joint council basis in the interests of economy and efficiency.

One Special Purposes Authority was set up during the year to provide transport services over the combined area of two councils in the Northern District.

The role of an Area Authority, which will probably be representative of all local government councils in a district, is seen as being largely a planning and co-ordinating one. One of their more important functions will be to draw up and to determine priorities within District Rural Development Programmes. The District Area Authorities will also take over the functions of the existing District Advisory Councils.

Consultation with and between the people of council areas in the Western, Northern, New Ireland, Western Highlands, Chimbu and Southern Highlands Districts progressed during the year on the question of the size and composition of Area Authorities for those districts. In each case these consultations were

initiated by a request from council representatives at formal meetings in the districts. Proclamations of Area Authorities will follow when agreement on detail has been reached and submissions receive government approval.

#### *District and Town Advisory Councils*

District Advisory Councils are non-statutory bodies which give residents an opportunity to express their views and to offer their advice to the District Commissioners on matters affecting the districts in which they live. There is a District Advisory Council in each of the 18 districts of Papua New Guinea. Each council consists of the District Commissioner, as chairman, and members appointed by the Administrator for terms of 2 years. Members are eligible for re-appointment.

Each council has a majority of Papua New Guinean members. The composition of each council by race is set out in Appendix II, Table 12.

Members of the House of Assembly are eligible for appointment to District Advisory Councils but are, in any case, eligible to attend and participate in the business of the councils as full members.

Town Advisory Councils were formed to enable members to express their views and to offer advice to officials on matters affecting the towns they are formed to serve. They are non-statutory bodies and operate in those towns not included in a local government council area.

Only 2 Town Advisory Councils remain, at Kavieng and Wau-Bulolo.

Members of the Councils are appointed from among prominent citizens of local influence, and hold office for a year. The Chairman is elected from among the members.

The composition of the remaining Town Advisory Councils is set out in Appendix II, Table 13.

District Advisory Councils will cease to operate on the formation of Area Authorities.

## CHAPTER 4

### THE PUBLIC SERVICE

#### *Legislation*

The Papua New Guinea Public Service is constituted under the *Papua New Guinea Act 1949-1971* and regulated by the *Public Service (Papua New Guinea) Ordinance 1963-*

1971, which came into operation on 10 September 1964.

Under the *Public Service Board Ordinance 1968-1970*, which came into operation on 1 April 1969, the office of Public Service Commissioner was abolished and the Commissioner's powers, duties and functions under the Public Service (Papua New Guinea) Ordinance were transferred to a Public Service Board. The Public Service Board is specifically charged with responsibility for 'adequate arrangements for the training of local officers and for their advancement to offices at all levels of the Public Service, ensuring as far as possible, a uniform approach to the problem of standards'. The Board's other functions are listed later in this Report.

Other important provisions relating to the Public Service are contained in the following legislation:

(i) the *Public Services Conciliation and Arbitration Ordinance 1969-1971*, which provides for the appointment of a Conciliation and Arbitration Tribunal for the hearing and determination of claims submitted on behalf of officers and employees of the Public Service;

(ii) the *Superannuation (Papua New Guinea) Ordinance 1951-1971*, which provides for pension and provident fund benefits for overseas officers;

(iii) the *Papua New Guinea Retirement Benefits Ordinance 1960-1971*, which provides for retirement benefits for local officers;

(iv) the *Workers' Compensation Ordinance 1958-1971*, which provides for compensation payments in respect of injury or incapacity arising out of or in the course of employment;

(v) the *Retirement Benefits (Contract Officers) Ordinance 1966-1970*, which provides for the payment of severance benefits to certain contract officers of the Public Service, and

(vi) the *Public Officers Superannuation Ordinance 1971*, which provides for pension and lump sum benefits for local officers;

(vii) The *Public Offices (Employment Security) Ordinance 1967-1968*, which provides for compensation and other benefits for permanent overseas officers retrenched through localisation or constitutional change.

Some important legislative changes took place during the year, viz.:

(a) Amendments to the Public Service Ordinance to introduce revised procedures for promotions within, and recruitment to, the Public Service. The new procedures were designed to speed up localisation of the Service without detracting from existing rights. A most significant change was the abolition of the promotions appeal system.

(b) introduction of the Public Officers Superannuation scheme (see (vi) above) and the consequential closure of the Papua New Guinea Retirement Benefits Fund to new contributors.

(c) during the year control of the Papua New Guinea Retirement Benefits Fund was transferred from Australia to Papua New Guinea by the *Papua New Guinea Retirement Benefits (Contributors and Control) Ordinance 1971*.

#### *Control, Structure and Staffing*

Under the Papua New Guinea Act the Minister of State for External Territories exercises control of the Public Service in such matters as the creation and abolition of offices, changes in the classification, designations and duties of officers, the determination of salaries and allowances and other conditions and the making of regulations and determinations under the Ordinance. The Public Service Board holds extensive delegations from the Minister to exercise power in many of these matters.

The Public Service Board comprises a Chairman and three members appointed by the Minister. The Board is responsible for the proper administration of the Public Service. Specifically, it is responsible for critical oversight of departmental activities and work methods in conducting Administration business; the creation and abolition of positions and for varying classifications, designations and duties of offices under authority delegated by the Minister; devising means for effecting economies and promoting efficiency; ensuring that adequate arrangements are made for the training of local officers and for their advancement to offices at all levels of the Public Service; the submission of reports and recommendations to the Minister on matters requiring his attention; and, the furnishing of an Annual Report to the Minister on the activi-

ties of the Board, and on the condition and efficiency of the Public Service.

At 30 June 1972, the composition of the four member Public Service Board was:

- Mr S. Pitoi—Chairman
- Mr N. F. Wicks—Member
- Mr F. N. Rolfe—Member
- Mr A. Taviai—Member

The Public Service consists of three divisions—the First Division which includes Heads of Departments; the Second Division which comprises positions of a professional, clerical and administrative nature and, the Third Division which embraces those offices not included in the First and Second Division.

Subject to the candidate satisfying such usual requirements as educational qualifications and medical fitness, a Papua New Guinean, male or female, may be appointed to any position in the Public Service.

Numbers of staff at 30 June 1971 and 30 June 1972 and classified according to the nature of their appointment status are shown in Table 1.

TABLE 1

|   | 30 June 1971 | 30 June 1972 |
|---|--------------|--------------|
| Within the Public Service—              |              |              |
| First, Second and Third Divisions—      |              |              |
| Permanent officers—                     |              |              |
| Overseas .. .. .                        | 1,193        | 1,119        |
| Local .. .. .                           | 7,159        | 7,953        |
| Contract officers .. .. .               | 2,634        | 2,848        |
| Temporary Employees—                    |              |              |
| Overseas .. .. .                        | 2,422        | 2,527*       |
| Local .. .. .                           | 6,411        | 7,170*       |
| Sub-Total .. .. .                       | 19,819       | 21,617       |
| Outside the Public Service—             |              |              |
| Statutory Appointees .. .. .            | 43           | 43           |
| Special Determination Employees .. .. . | 32           | 27           |
| Sub-Total .. .. .                       | 75           | 70           |
| Total .. .. .                           | 19,894       | 21,687       |

\* Part-time employees no longer included with Temporary staff.

Table 2 shows the types of employees working under the Public Service Ordinance over the past 5 years.

TABLE 2

|              | Employed under Public Service Ordinance |            |        | Special Determinations (Asians and mixed races) | Administration Servants |
|--------------|---|------------|--------|---|-------------------------|
|              | Local                                   | Expatriate | Total  |   |                         |
| At 30 June—  |   |            |        |   |                         |
| 1968 .. .. . | 12,066                                  | 6,399      | 18,465 | 75  | 275                     |
| 1969 .. .. . | 13,218                                  | 6,779      | 19,994 | 53  | 233                     |
| 1970 .. .. . | 14,564                                  | 7,197      | 21,761 | 53  | 201                     |
| 1971 .. .. . | 13,570                                  | 6,249      | 19,819 | 32  | 170                     |
| 1972 .. .. . | 15,123                                  | 6,494      | 21,617 | 27  | 142                     |

The majority of Administration Servants have been absorbed into the Public Service. The 142 remaining are either educationally unqualified or medically unfit for permanent appointment. Where permanent appointment has been prevented for medical reasons, the application is kept under review.

*Salaries and Conditions*

During the year a number of significant changes took place in the conditions of service for Local Officers.

The promotion and appeal system was replaced by an entirely new promotion selection procedure. Basically, the procedure provides for Selection Committees to consider applications for advertised vacancies and to make promotions or transfers without appeal rights being available to unsuccessful applicants. A significant aspect of the new system is that it provides for the promotion of efficient local officers but, at the same time, protects the promotional opportunities of efficient overseas officers.

As a result of a claim made under the *Public Services Conciliation and Arbitration Ordinance 1969-1970*, the qualifying period for Local Officers to be granted assisted passages whilst travelling on recreation leave was reduced from three to two years.

On 1 January 1972 the Public Officers' Superannuation Ordinance came into force, making a pension scheme available to all Local Officers in public employment. This scheme replaces the former retirement benefits fund which provided only for a lump sum payment on retirement of three times the sum of the officer's contributions plus interest. The new scheme provides for a pension to be paid on retirement, based on the officer's salary during service with a minimum fortnightly payment of eight dollars (\$8.00).

The Public Service Board has approved a set of conditions under which maternity leave may be granted to female employees.

These conditions enable the employee to be granted any leave entitlements she may have including sick leave with pay, for up to six weeks prior to her confinement and for a minimum six weeks after her confinement. An employee will not have her services terminated during a period of leave of absence granted to her for her confinement.

#### *Industrial Conciliation and Arbitration*

During the year the Public Service Association and the Papua New Guinea Teachers' Association combined to lodge claims for variations in conditions of public employment. Some claims lodged during the previous year were also settled.

In addition to the variation in conditions relating to leave fares for local officers, the Public Services Conciliation and Arbitration Tribunal determined five claims on which agreement could not be reached. The Tribunal rejected two claims, one seeking an increase in the salary payable to the Secretary of the Department of Social Development and Home Affairs, and the other seeking service increments for drivers employed by the Department of Transport. The Tribunal awarded increases in salary and overtime allowance for local health extension officers and local health inspectors, and increases in the rates of secondary education allowance for overseas officers.

Agreement was reached on claims for increased salaries for graduate professional officers, physical training instructor (Police College) and overseas health extension officers. Agreement was also reached on claims concerning entitlements under the *Retirement Benefits (Contract Officers) Ordinance 1966-1970* and overtime payment for resident medical officers.

A number of other claims, including a claim for restructuring and raising the local salary scale, are still being negotiated. The Public Services Conciliation and Arbitration Tribunal has set down for hearing early in July a claim for an interim increase in local salaries.

The following Determinations were made during the year:

#### Ministerial—

Public Service (Overseas Officers Allowances) Determination 1972

#### Public Service Board—

Public Service (Exempt Officers) Determination 1971

Public Service (Exempt Officers) Determination No. 2 of 1972

Public Service (Selection Committees) Determination 1972

#### *Recruitment of Local Officers*

The Service increased by approximately 1,600 local officers, employees, apprentices, trainees and other job categories.

As is customary, the main supply of new recruits to the Service came from the ranks of school leavers. The Service obtained about 45 per cent of the total number of students leaving secondary schools throughout Papua New Guinea. Included in this relatively high percentage are those selected for teacher training.

Three out of every 4 school leavers recruited chose a course of study at one of the many Public Service training institutions located throughout Papua New Guinea. The remainder entered direct employment with a government department.

The demand for Papua New Guinean graduates from the University of Papua New Guinea and the Papua New Guinea Institute of Technology still far exceeds the supply. During the year the Service recruited more than half of those who graduated.

Local officers of the Department of the Public Service Board visited secondary

schools during the year and discussed the Public Service, and the Service as a career with students.

Cessation of external examinations at school Form 3 level has led to a marked decrease in students leaving school at that level. In consequence, it is expected that within 2 years the short fall in school leavers with Form 4 qualifications or better will lessen.

#### *Localisation*

On 30 August 1971, the Public Service Board issued a White Paper entitled 'Accelerated Localisation and Training', in effect a statement of policies aimed at speeding up localisation in the Public Service.

The White Paper indicated that priority attention would be given to higher administrative and executive development training, to the upgrading of general educational levels and to the improvement of clerical/administrative skills.

The localisation committees planned in the White Paper have been set up and are now operating in all departments. All committees have progressed satisfactorily in developing the necessary basic records. Departments have also commenced planning career development programmes for local officers in their employ.

The recently revised selection procedures give preference in promotion to efficient local officers.

The new procedures provide that all vacant positions to be filled substantively must be advertised in the *Papua New Guinea Gazette*. Applications are considered by a three-man Selection Committee. A Papua New Guinean may win outright on merit. On the other hand, an overseas officer may be regarded as the most efficient candidate for the vacancy in which case, if there is also a Papua New Guinean candidate adjudged competent to do the job, he is promoted and the overseas officer is transferred to another position and at a salary level not less than that of the promotional position. Where 2 or more competent local candidates are available the most efficient candidate is promoted.

Over the 6 months period before the Public Service Board White Paper was issued, confirmed promotions of local officers employed under the Public Service Ordinance amounted to only 33 per cent of the total number of promotions confirmed. For the 6 months after the issue of the White Paper,

the figure had risen to 66 per cent of the total. Local officer promotions had in fact increased from 316 in the first half year to 1,152 in the second half year.

Papua New Guineans holding senior appointments at 30 June 1972 are:

Mr Sere Pitoi, Chairman, Public Service Board.

Mr Aisea Taviai, Member, Public Service Board.

Mr Alkan Tololo, Commissioner, Teaching Service Commission.

Mr Paulius Matane, Head of Department of Business Development.

Following discussions between officers of the Administrator's Department, the Public Service Board and the Administering Authority, a 'Senior Executive Programme' was launched in September 1971 for selected local officers of the Public Service. The programme aims to prepare a number of local officers to assume the responsibilities of senior office by the end of 1972.

Thirty-one Papua New Guineans are participating in the initial programme, including 2 officers from the Pacific Islands Regiment and one on loan to the Department of the Army. A local officer may enter the scheme at any level and may leave it on appointment to a position that will make use of the skills and knowledge gained from his programme attachment. It is envisaged that members of the Senior Executive Programme will share some of their experiences and knowledge by remaining with the programme in an advisory or a training capacity after 'graduation'.

Recognising that there are insufficient manpower resources to localise fully all top level positions in the Public Service in one operation, the Public Service Board has drawn up tentative priority lists of positions and work areas to be localised. These lists embrace all departments and are now being considered by the Government of Papua New Guinea.

The Public Service Board is currently examining the possibility of introducing career streaming to the clerical and administrative work areas. Career structures have already been reviewed for such job categories as Interpreters, Communications Officers and Extension and Information Officers.

Job qualifications for clerks (Classes 1 through to 4) have been simplified and standardised. The offices of taxation assessor

and postal clerk have also been examined in the context of career streaming.

### *Psychological Services*

The Public Service Board's Psychological Services Branch has the function of assisting in the selection, placement, development and proper adjustment of members of the Public Service, statutory bodies, and government sponsored institutions.

Special attention has been given to the creation of adequate central research and reference facilities designed to adapt psychological procedures to local circumstances. A continuous watch is maintained through related overseas agencies on procedures being adopted in other developing countries.

Activities are geared to the theme of identification and accelerated advancement of school leavers and local officers most capable of benefiting from opportunities for further training and education.

Psychological testing is applied to all potential school leavers at Forms 3 and 4 levels. The results of these tests which include measures of vocational interests as well as abilities, aptitudes and attainments are taken into account in selections for Public Service training institutions and all other tertiary institutions. Psychological assessment is also taken into account in the awarding of tertiary scholarships, Public Service free places and cadetships, as well as for the more important in-service training courses.

A recent significant development is the application of intensive leaderless group or 'country house' type assessment programmes to assist the career planning of local officers of the Public Service Officers are identified for these training courses and job experiences, including job rotations, most suited to their abilities and background.

A large number of group assessment programmes were carried out during the year. Of particular note are those conducted with the Departments of Education, Public Works and Agriculture, Stock and Fisheries. With very few exceptions, Papua New Guineans who now occupy positions at the middle-management and professional levels in the Public Service have passed through such programmes as part of a career streaming exercise designed to channel with optimum effect their skills and resources. A wide cross-section of industry benefited in a similar way through

assistance from the Board's Psychological Services team during the year.

Psychological services also extended to the counselling and clinical fields, screening of overseas applicants for 'high contact' training appointments in Papua New Guinea, assisting in programmes connected with training of nurses and corrective institution officers, and in management.

Following increased pressures for counselling, assessment and selection services, and for assistance on various local research projects, regional psychological services were expanded during the year in the Highlands, New Guinea Coastal, New Guinea Islands and Papua regions.

Research and advisory tasks included assessment of the value of political education projects, attitude and motivation surveys, staff appraisal procedures, job satisfaction studies and validation follow-up of techniques used.

### *Training*

Training for serving local officers and school leaver recruits may be classified into 9 broad categories:

- Scholarships
- Cadetships
- Free Place Scheme
- Traineeships
- Apprenticeships
- Public Service Board Regional Training Centres
- Administrative College
- Commonwealth Practical Training Scheme
- Australian School of Pacific Administration.

*Scholarships*—These are awarded on merit and provide entrance to tertiary institutions such as the University of Papua New Guinea and the Institute of Technology. Administered by the Department of Education, the scheme provides for the payment of fees for full-time study, text book allowances, living allowances and, where necessary, annual return fares between the student's home and the institution attended.

*Cadetships*—These provide tertiary education either at University or the Institute of Technology on a full-time basis. Cadets are employed in departments during vacations and are paid full salary.

First introduced in 1970, the Public Service Cadetship scheme offers cadetships to school leavers and others outside the Public Service as well as to serving local officers. Eight cadets graduated from their courses during the 1971 academic year.

The number of cadets was increased to 143 in the 1972 academic year, and at the end of June, 1972 courses of study and cadet numbers were as follows:

|                                      |    |
|--------------------------------------|----|
| Arts .. ..                           | 20 |
| Civil Engineering .. ..              | 18 |
| Finance .. ..                        | 15 |
| Law .. ..                            | 12 |
| Surveying .. ..                      | 12 |
| Architecture .. ..                   | 11 |
| Economics .. ..                      | 10 |
| Agricultural Science .. ..           | 9  |
| Medicine .. ..                       | 7  |
| Education .. ..                      | 7  |
| Mechanical Engineering .. ..         | 4  |
| Electrical Engineering .. ..         | 4  |
| Social Work .. ..                    | 4  |
| Science .. ..                        | 3  |
| Forestry .. ..                       | 2  |
| Veterinary Science .. ..             | 2  |
| Psychology .. ..                     | 2  |
| Telecommunications Engineering .. .. | 1  |

TOTAL 143

It is expected that 16 cadets will graduate during 1972.

*Free Place Scheme*—This scheme administered by the Public Service Board, offers full time tertiary education to serving local officers. Courses are available at either the University or the Institute of Technology. Two Free Place Students graduated at the end of the 1971 academic year. Following the grant of additional free places for 1972 there are now 38 free place holders taking tertiary courses.

*Traineeships*—These are for school leavers who, subject to having reached a satisfactory educational standard, may be accepted into one of the 28 training institutions operating within the framework of the Public Service of Papua New Guinea.

A trainee has the status of a salaried temporary public servant who on successful completion of training may be appointed permanently to the Public Service.

*Apprenticeships*—Trade training in some 20 different trades is provided through a number

of departments. Apprenticeships, of 4 or 5 years duration and, in most cases requiring at least part time attendance at a technical college, are administered by the Apprenticeship Board. At 30 June 1972 there were 694 apprentices undergoing training in Public Service Departments.

*Regional Training Centres*—Public Service Training Centres have been established at Port Moresby, Rabaul and Madang to cater for general clerical/administrative and supervisory training on a service-wide basis. Specialist courses are also being conducted to meet the individual needs of departments and statutory authorities.

*Administrative College*—The Administrative College of Papua New Guinea made a significant contribution to localisation of the Public Service during 1971-72. The College expanded its existing programmes and was able to establish programmes covering new ground.

The figures shown in the accompanying comparison tables are for officers completing courses in 1970 and 1971 and enrolments for 1972.

|  | 1970 | 1971 | 1972    |
|--|------|------|---------|
| Public Service Certificate—<br>For entry to Second<br>Division (formerly Stage 1)  | 28   | 30   | (a) 30  |
| Public Service Higher Certificate—For advancement<br>within Second Division,<br>entry to Diploma Adminis-<br>tration Course, etc. .. | 125  | 153  | (b) 178 |
| Diploma in Administration—<br>Qualifies for advancement<br>to higher levels of Second<br>Division—                                   |      |      |         |
| First year .. ..   | 12   | 20   | 32      |
| Second year .. ..  | 5    | 12   | 20      |
|  | 17   | 32   | 52      |
| Local Court Magistrates—<br>For appointment as Assis-<br>tant Magistrate of Local<br>Court .. ..                                     | 7    | 7    | 16      |
| Mature Age Magistrates—For<br>appointment as Assistant<br>Magistrate .. ..   | 7    | 9    | 7       |
| Library Assistants .. ..   | 15   | 13   | 13      |
| Library Officers (initial intake<br>1972) .. ..  | ..   | ..   | 21      |

(a) Transferred to Australian School of Pacific Administration, Mosman, NSW. (b) Additional 60 officers commenced Higher Certificate Course at ASOPA in 1972.



A pleasing feature of the Administrative College 'long' courses is the high percentage of successful candidates sitting for final examinations.

|              | Number assessed | Number graduating |
|--------------|-----------------|-------------------|
| 1970 .. .. . | 255             | 235               |
| 1971 .. .. . | 292             | 277               |

Careful selection, regular testing and review combined with small-group teaching methods has enabled the College to maintain the highly successful graduation rate of better than 92 per cent from those Officers finally assessed.

The training of some 513 officers to Public Service Higher Certificate level since 1964 is beginning to show dividends as reflected in enrolments for the Diploma course in Administration which show a significant increase annually, a trend which is expected to continue for the next few years.

Diploma in Administration—first year enrolments:

|              |    |
|--------------|----|
| 1969 .. .. . | 12 |
| 1970 .. .. . | 15 |
| 1971 .. .. . | 21 |
| 1972 .. .. . | 32 |

Programmes established embrace management training for local officers of the Public Service. Training is offered at 3 levels—

- introductory—for junior clerical grades—of 2 weeks duration.
- middle—for more experienced officers—at the middle management level—of 8 weeks duration with supplementary training in Australia.
- advanced—for senior level—of 13 weeks duration, with supplementary training in Australia.

During the period 1 July 1971 to 30 June 1972 enrolments to the Administrative College management training programme were as follows:

| Course                  | Number of courses | Number of officers attending |
|-------------------------|-------------------|------------------------------|
| Introductory Management | 12                | 208                          |
| Middle Management ..    | 4                 | 55                           |
| Advanced Management ..  | 1                 | 14                           |

The Administrative College has made a substantial material contribution to the Senior Executive Programme.

Seminars, conferences and discussion groups have been conducted by the College. From these activities senior local officers have been provided with draft personal development plans for their future advancement in the Public Service. Simultaneously, Public Service management has been provided with useful data for localisation purposes.

The Administrative College passed two important milestones at the end of the 1971 teaching year—it graduated its one-thousandth local officer from 'long' courses and provided its one-thousandth place for local officers in the short-course programme.

*The Commonwealth Practical Training Scheme.* This scheme commenced in March 1970 to provide practical training for Papua New Guinean officers in on-the-job situations in Australia for periods averaging 6 months.

During the year, 141 officers travelled to Australia for training under the Scheme. During the same period a number of overseas duty tours were made by serving officers for training purposes. The following table shows the number of tours made during the year and includes WHO Courses and Fellowships.

| Department of                               | Local Officers |                     |           | Expatriate Officers |                     |           | Total |
|---|----------------|---------------------|-----------|---------------------|---------------------|-----------|-------|
|   | To Australia   | Else-where overseas | Sub-total | To Australia        | Else-where overseas | Sub-total |       |
| Public Health .. .. .                       | 37             | 41                  | 78        | 1                   | 4                   | 5         | 83    |
| Transport .. .. .                           | ..             | 1                   | 1         | 1                   | ..                  | 1         | 2     |
| Agriculture, Stock and Fisheries .. .. .    | 12             | 6                   | 18        | 5                   | 2                   | 7         | 25    |
| Administrator .. .. .                       | 12             | ..                  | 12        | 2                   | ..                  | 2         | 14    |
| Education .. .. .                           | 6              | 3                   | 9         | 1                   | ..                  | 1         | 10    |
| Lands, Surveys and Mines .. .. .            | 8              | ..                  | 8         | 1                   | 1                   | 2         | 10    |
| Social Development and Home Affairs .. .. . | 10             | 6                   | 16        | ..                  | 1                   | 1         | 17    |
| Forests .. .. .                             | ..             | 2                   | 2         | 2                   | ..                  | 2         | 4     |
| Posts and Telegraphs .. .. .                | 5              | ..                  | 5         | 17                  | ..                  | 17        | 22    |
| Law .. .. .                                 | 2              | ..                  | 2         | ..                  | ..                  | ..        | 2     |
| Public Works .. .. .                        | 7              | ..                  | 7         | ..                  | ..                  | ..        | 7     |
| Trade and Industry .. .. .                  | ..             | ..                  | ..        | ..                  | 2                   | 2         | 2     |
| Royal Papua New Guinea Constabulary .. .. . | 2              | ..                  | 2         | ..                  | ..                  | ..        | 2     |
| Labour .. .. .                              | 3              | 6                   | 9         | 2                   | ..                  | 2         | 11    |
| Public Service Board .. .. .                | 4              | ..                  | 4         | 3                   | ..                  | 3         | 7     |
| Treasury .. .. .                            | 8              | ..                  | 8         | ..                  | ..                  | ..        | 8     |
| House of Assembly .. .. .                   | ..             | ..                  | ..        | ..                  | ..                  | ..        | ..    |
| Information and Extension Services .. .. .  | 8              | 3                   | 11        | ..                  | ..                  | ..        | 11    |
| Business Development .. .. .                | ..             | 4                   | 4         | ..                  | ..                  | ..        | 4     |
|   | 124            | 72                  | 196       | 35                  | 10                  | 45        | 241   |

#### Summary

|                        | To Australia | Else-where | Total |
|------------------------|--------------|------------|-------|
| 1970-71—               |              |            |       |
| Local officers ..      | 42           | 48         | 90    |
| Expatriate officers .. | 187          | 39         | 226   |
| 1971-72—               |              |            |       |
| Local officers ..      | 124          | 72         | 196   |
| Expatriate officers .. | 35           | 10         | 45    |

#### Establishments

Some of the more important organisation matters dealt with during the year included the creation of an Office of the Chief Minister, an Office of Higher Education, the transfer of the Nautical Training School from the Department of Transport to the Department of Education and the transfer of the Bureau of Statistics from the Department of Social Development and Home Affairs to the Office of Programming and Co-Ordination.

The progressive takeover of activities from Australian Public Service Departments included the takeover by the Department of Public Works of the Commonwealth Department of Works' responsibilities in East New Britain. This required the creation of a large number of new positions. A considerable

number of new positions were also created to enable the permanent appointment to the Papua New Guinea Public Service of local officers, employed by Australian Departments. By arrangement the services of these officers are made available to the Australian Government without infringement of their career prospects and rights in the Papua New Guinea Public Service.

Establishment changes were also made in a number of areas to facilitate implementation of the policy of accelerated localisation within the Public Service. This included reviews of qualifications and increases in resources for training and staff development.

Classification and category reviews covered a wide range of occupational groups including Business Extension Officers, Co-operatives Development Officers, Customs Officers, Drivers, Forestry Officers, positions in Corrective Institutions and the Division of District Administration, and positions of Translators and Interpreters.

#### Methods

With the approach of the nation's self government and independence priority was placed on those projects with a localisation bias rather than independent reviews for specific departments. Greater emphasis was placed on reviews aimed at simplifying work procedures and on the production of documentation for training purposes.

Projects associated with the Work Simplification programme were:

- Assessment of the feasibility of establishing a central unit for processing staff and salary clerical work related to expatriate officers.
- Examination of common work areas and development of procedure manuals. Manuals currently in the course of preparation cover staff and salary calculating procedures, typing and secretarial services.
- Introduction of work documentation programmes in departments.

With the imminent introduction of (telephone) Subscriber Trunk Dialling to Papua New Guinea, the Department of Posts and Telegraphs requested a review into all aspects of its Telecommunication Accounts Section. The review covered all clerical operations and an evaluation of the feasibility of introducing monthly billing for all telephone accounts.

The bulk of the Department's office equipment investigations and forms design work is now being handled by Papua New Guinean Methods officers.

A major development in the field of Electronic Data Processing was the acquisition by the Public Service Board of the local computer bureau. The computer bureau will pass to its new owners on 1 July 1973.

The computer's capacity is now being expanded so that it will meet more adequately Government requirements. Specialist staff have also been made available to permit optimum use of facilities. During the year the Public Service Board's Department continued to provide an EDP consultative service to Departments.

#### *Australian School of Pacific Administration (ASOPA)*

The function of the School, which is located in Sydney, Australia, is defined by the *Papua and New Guinea Act 1949-1971* as 'to provide special courses for the education of officers and prospective officers of Papua New Guinea, and such other persons as are prescribed'.

On 3 November 1971 the Minister of State for External Territories announced the Australian Government's decision to develop the School as a centre for training Papua New Guineans in preparation for self-government

and independence. Outlining the School's new independence. Outlining the School's new role, the Minister said:

'The basic decision is that the Australian School of Pacific Administration should supplement training and undertake specially structured training which cannot be better or more conveniently provided in Papua New Guinea or elsewhere in Australia. Opportunities will also be provided in future for trainees from South Pacific countries to attend courses at ASOPA.

In its new role, ASOPA will concentrate on administrative and specialised training to prepare Papua New Guinean public servants for accelerated advancement within the Papua New Guinea Public Service. It will work very closely with the Papua New Guinea Administrative College.

The School will provide a range of courses. It will provide supporting segments to middle and advanced management training courses conducted by the Administrative College, additional sessions of the Papua New Guinea executive development scheme to qualify local officers for advancement to and within the Second Division of the Papua New Guinea Public Service, and specialised ad hoc courses. For example, a new course in Industrial Relations for Papua New Guineans will be commenced next year, and the School will conduct a further session of a Local Government Practice Course for Papua New Guineans.'

To enable the School to take on its new role of training Papua New Guineans, the Canberra College of Advanced Education has assumed responsibility for training Australian secondary school teachers for Papua New Guinea.

At 30 June 1972, 105 Papua New Guineans were attending courses at ASOPA. There were 90 undertaking vocational education courses of 8 months' duration and a further 15 were attending a 3 months' course in Industrial Relations.

## CHAPTER 5

### SUFFRAGE

#### *General*

The *Electoral Ordinance 1963-71* provides for:

- (i) the appointment of the Chief Electoral Officer to administer the Ordinance.

- (ii) the appointment of Returning Officers.
- (iii) the appointment of polling places.
- (iv) the establishment of electoral rolls.
- (v) definition of methods of nomination.
- (vi) hearing by the Supreme Court, as a Court of Disputed Returns, of petitions concerning the validity of an election or a return; and
- (vii) definition of illegal practices at elections and penalties for these.

The Chief Electoral Officer is statutorily responsible for three types of elections:

- (a) national elections
- (b) local government elections; and
- (c) trade union elections.

#### *National Elections*

The Electoral Ordinance provides for universal adult suffrage on a common roll for election of members of the House of Assembly. Qualifications for entitlement to vote are:

- (a) Age—18 years or over.
- (b) Residential—all persons (other than aliens as defined in the *Citizenship Act* 1948-1969, who have lived in an electorate for 6 out of the preceeding 12 months are entitled to enrol for and to vote in that electorate. (Persons who regard their 'real place of living' as in an electorate other than that in which they presently live or contract workers employed away from their normal home are entitled to enrol and vote for an electorate other than that of their current residence).

Enrolment is compulsory. New common rolls were prepared for the 1972 election by teams of electoral officials, who spent several weeks in the field in each area revising and updating. Provision is also made in the Electoral Ordinance to allow a person whose name is not listed on the roll, but is otherwise eligible for enrolment, to vote at an election.

There are 82 open and 18 regional electorates (the latter consisting—except in the case of Manus—of 2 or more open electorates) in Papua New Guinea. Any elector over the age of 21 years may contest an open electorate, but persons not born in Papua New Guinea must in addition, have resided there for a period of five years. A further qualification

for candidature for Regional electorates is possession of educational qualifications of intermediate certificate or its equivalent.

Voting is not compulsory. The system of optional preferential voting enables each elector to show a consecutive order of preference for all candidates in his electorate, or if preferences are shown for only some of the candidates to give effect to his intentions so far as these are clear.

Following the presentation of provisional proposals by the Electoral Boundaries Distribution Committee reported on in the 1970-1971 Annual Report, a total of 41 objections were received by the Committee during the three-month period allowed for. In response to these objections the Committee made 8 alterations to its original proposals. The final recommendations were accepted by the House of Assembly.

The Administrator of Papua New Guinea appointed the following dates for the 1972 General Election:

- (a) Rolls closed, 29 November 1971.
- (b) Nominations opened, 29 November 1971.
- (c) Nominations closed, 29 December 1971.
- (d) Polling commenced, 19 February 1972.
- (e) Polling ended, 11 March 1972.
- (f) Return of writs, 3 April 1972.

A total of 12 Papua New Guinean officers were appointed as Returning Officers. At the close of nominations, a total of 611 candidates had nominated to contest the 100 electorates (82 open, 18 regional). Fifty-one of these were Regional candidates and 560 were candidates for Open Electorates. Only 2 out of the total of 611 were elected unopposed in East Sepik Regional and West Sepik Coastal Open electorates, leaving a total of 609 to contest the election. However, this total was reduced to 600 with the death of a candidate from Middle Ramu Open which occurred after the close of nomination and before the commencement of polling and which necessitated the suspension of that election. When the supplementary election for Middle Ramu was conducted in August 1972, a total of 6 candidates nominated.

Four female candidates stood for election and for the first time one was elected. (Central Regional).

The following table gives the break-up in the candidates who stood for election by ethnic origin:

| Papua New Guinean | European | Asian | Mixed Race |
|-------------------|----------|-------|------------|
| 569               | 34       | 4     | 1          |

Ninety-nine out of the 100 elected members had taken their seats at the end of the period covered by this Report. The exception was the seat of Middle Ramu referred to above, the supplementary election for which was to take place in August 1972. Another seat (Kairuku-Hiri) was the subject of an appeal to the Court of Disputed Returns by a defeated candidate on the grounds that ballot papers damaged in a flood accident would have affected the outcome of that election. The Court had not yet given its decision by 30 June 1972.

Two new procedures were introduced on an experimental basis for the 1972 elections. To assist illiterate voters, ballot papers included the photographs of all candidates. Voters Identification Tribunals consisting of responsible people in each village were set up to identify voters who could not be identified from the electoral roll. The Electoral Officer was to make a full report on the 2 experiments in his Report on the 1972 National Elections.

A United Nations Visiting Mission observed the elections and commented favourably on the thorough and fair administration by all concerned.

*Trade Union and Local Government Council Elections:* As well as conducting the House of Assembly elections, the Electoral Office also supervises the conduct of the Trade Union and Local Government Council elections. The Returning Officers for these elections are appointed by the Chief Electoral Officer under the Trade Union and Local Government Council ordinances. Officers from the Department of Labour and Office of the Commissioner for Local Government are responsible for the proper conduct of these elections.

*Staff-Electoral Office:* The Electoral Office has a staff of 9 (6 local and 3 temporary expatriate officers). Both the Chief Electoral Officer and the Deputy Chief Electoral Officer are Papua New Guineans. It is hoped to establish 18 District Electoral Offices,

one in each District, to be staffed by Papua New Guinean electoral clerks so that the major task of compiling electoral rolls may be decentralised. Already one Papua New Guinean electoral clerk is permanently based in Rabaul. Two more are undergoing training and they will be posted to Mount Hagen and Madang. By 1976 it is anticipated that many more Papua New Guineans will play a major part in the planning and conduct of their country's national election.

## CHAPTER 6

### POLITICAL ORGANISATIONS AND PARTIES

There is now no national political organisation not represented in the House of Assembly and the main development in the period under review was the greatly increased role of political parties in the February-March 1972 elections and in subsequent events. In many areas at least some people stood as the endorsed candidates of particular parties. Although it is doubtful whether preference for parties (rather than the personality of the candidate or other local factors) played the major role in the choices of electors in most cases, parties for the first time played a major instead of a marginal role in events of national importance.

Despite a strong tendency to identification with particular regions, political parties differed from organisations of a strictly local nature (such as the Mataungan Association on the Gazelle Peninsula of New Britain or Napidakoe Navitu on Bougainville) in putting themselves forward as national bodies involved with the whole of Papua New Guinea. Of the national parties only one, the New Guinea National Party, is completely confined to representatives from the Highlands Districts, while there are no People's Progress Party members from Highlands electorates.

Parties are distinguished more by differences of emphasis in shared view than by adherence to totally distinct ideologies. The 3 major parties which formed the National Coalition Government in April 1972 were:

- (i) Pangu—with approximately 28 of the 100 elected members in the House;
- (ii) New Guinea National Party, with 8 members; and
- (iii) People's Progress Party, with some 10 members.

Pangu Party members campaigned for immediate self-government and stressed the need for improved labour and social conditions to go hand in hand with economic development and for a more discriminating approach to foreign investment. The People's Progress Party likewise called for control of such investment in the interests of a maximum spread of benefits, but emphasised the primary requirement for stable government and institutions—using the concept that it was the nature, not the timing, of self-government that was important. Apart from a reluctance to commit itself to a definite timing for self-government, the National Party has a close alignment to the policies of Pangu.

The opposition in the House consists of approximately 40 members or supporters of the United Party, which was critical of further steps towards self-government without more political experience and education among the general public, reluctant to impose controls which would deter needed foreign investment (although seeking a direct share in major projects) and strongly emphasising rural rather than urban development. The greater part of United Party representation is from the Highlands, but it has MHA's from almost all Districts.

Three out of the 4 MHA's from the Gazelle Peninsula are members of the Mataungan Association, which seeks greater autonomy for that area. It has supported the National Coalition, as do the representatives of Napi-dakoe Navitu which aims to advance the special interests of Bougainville.

## CHAPTER 7

### THE JUDICIARY

#### *System of Courts*

The following courts exercise jurisdiction within Papua New Guinea.

- (i) The Supreme Court of Papua New Guinea;
- (ii) District Courts;
- (iii) Local Courts;
- (iv) Children's Courts; and
- (v) Warden's Courts.

*Supreme Court.* The Supreme Court established under the *Papua New Guinea Act 1949-1971* is the highest judicial authority in Papua New Guinea.

The *Supreme Court Ordinance 1949-1958* confers on the Court an unlimited jurisdiction in criminal and civil matters. The principal seat of the Court is at Port Moresby but circuits, which are in continual operation, enable the court to sit throughout Papua New Guinea. There are 60 appointed sitting places distributed evenly throughout the country.

The Court consists of a Chief Justice and such other Judges as are appointed by the Governor-General of the Commonwealth of Australia. At present the Court consists of a Chief Justice and 6 other Judges.

To be eligible for appointment as a Judge a person must be a barrister or solicitor of the High Court of Australia or the Supreme Court of a State or Territory of the Commonwealth of not less than five years standing. A judge may be removed from office by the Governor-General only on the ground of proved misbehaviour or incapacity. Judges retire at 65 years of age.

The jurisdiction of the Court may be exercised by a Judge or Judges sitting in Chambers. The normal British and Australian procedure governing the methods of control and ascertaining of facts is followed by the Court, except that all issues, civil and criminal, are tried without a jury. It is considered that, in the present stage of development of the Papua New Guinean people, a Judge sitting alone exercising the functions of both Judge and jury affords the best assurance of justice.

The *Supreme Court (Full Court) Ordinance 1968* provides for a Full Court of at least three Supreme Court Judges to hear appeals from the decision of a single Judge in both civil and criminal cases. The Court may affirm or vary the decision on sentence appealed from, or remit the case in whole or in part for further hearing, or order a new trial. A question of law arising in a criminal trial may be reserved for the consideration of the Full Court. The Full Court heard 23 appeals during the year.

The High Court of Australia has jurisdiction, subject to prescribed conditions, to hear and determine appeals from judgments, decrees, orders and sentences of the Supreme Court.

*District Courts.* District Courts are constituted under the *District Courts Ordinance 1963-1970*. They have a civil jurisdiction which covers claims of amounts up to \$2,000. They

have a criminal jurisdiction over offences punishable by up to 12 months' imprisonment. In relation to indictable offences, that is, offences punishable by more than 12 months' imprisonment, the District Court only has power to conduct a preliminary hearing and, if it finds a case has been made out, to commit the defendant for trial by the Supreme Court.

The Administrator may establish District Courts under the ordinance, and courts have been established for each administrative district.

A court may be constituted by a Stipendiary Magistrate, a Resident Magistrate or a Reserve Magistrate. Stipendiary Magistrates and Resident Magistrates are appointed by the Governor-General and hold office on conditions determined by the Minister of State for External Territories.

Stipendiary Magistrates are usually qualified barristers or solicitors while Resident Magistrates are drawn from officers of the Division of District Administration who have had long practical experience. At present there are 5 Stipendiary Magistrates and 13 Resident Magistrates, 3 of whom are Papua New Guinean magistrates.

Reserve Magistrates are appointed by the Administrator when he considers it necessary in the interests of the effective and speedy administration of justice to do so. District Courts in remote centres are usually constituted by Reserve Magistrates. Five Papua New Guinean Local Court Magistrates have been appointed District Court Magistrates.

The District Courts Ordinance provides that, subject to the powers and authority of the Supreme Court, a District Court Magistrate is not subject to any direction whatsoever in, or in relation to, the determination of a case before him.

Appeals from the District Court in both civil and criminal cases and on questions either of fact or of law lie to the Supreme Court.

*Local Courts.* Local Courts are constituted under the *Local Courts Ordinance* 1963-1966. Local Courts have civil jurisdiction over matters involving up to \$200, including matters regulated by native custom, and criminal jurisdiction over minor offences for which the penalties are not greater than a fine of \$100 or 6 months' imprisonment.

Local Courts also exercise jurisdiction in relation to adoptions by traditional custom pursuant to the *Adoption of Children (Customary Adoptions) Ordinance* 1969.

Where jurisdiction is vested in both a Local Court and some other Court the matter may only be determined in the Local Court where the Court certifies that it is expedient that the matter should be so heard and determined. Where another Court also has jurisdiction the defendant in either a civil or criminal matter may elect to have the matter heard in the other court if he so wishes.

A Magistrate of a Local Court, appointed by the Administrator, conducts a Local Court. In addition, provision is made for the appointment of Assistant Magistrates who may mediate between parties, sit with the Court on hearings and perform other functions ancillary to the administration of justice in this jurisdiction.

Thirty-seven Papua New Guineans have been appointed full-time Local Court Magistrates, with another 18 due to be appointed shortly. From time to time field officers of the Division of District Administration are appointed Local Court Magistrates to service those areas which cannot conveniently be covered by a full-time Magistrate. Such appointments permit the convening of Local Courts in remote areas and are expected to decrease in number as access and communications improve and the number of full-time Magistrates increase. One hundred and forty Papua New Guineans have been appointed to the office of Assistant Magistrate.

An appeal lies from a Local Court to the Supreme Court.

*Children's Courts.* Children's Courts, established under the *Child Welfare Ordinance* 1961-1969, have jurisdiction in respect of all offences by children (other than homicide, rape or other offences punishable by death or imprisonment for life) and all applications and complaints under the ordinance. They have power to declare offenders to be incorrigible or uncontrollable children and to commit them to special institutions established under the ordinance. For the purposes of the ordinance a person under the age of 16 years is a child.

In any area where there is no specially constituted Children's Court a District Court may deal with a charge against a child as if it were a duly constituted Children's Court.

The Administrator appoints persons to be magistrates of Children's Courts. One member of the Children's Court in each area must be a woman.

*Warden's Courts.* Under the *Mining Ordinance* 1928-1966 (New Guinea) and the *Mining Ordinance* 1937-1966 (Papua) Warden's Courts may be established for each goldfield or mineral field with jurisdiction over civil cases concerning mining or mining lands and offences against mining laws. These courts are conducted by Wardens appointed by the Administrator under the Mining Ordinance.

#### *Other Courts and Tribunals*

In addition to the five types of courts listed above, several quasi-judicial bodies have been created for special purposes.

A Land Titles Commission has been set up under the *Land Titles Commission Ordinance* 1962-1971. The Commission consists of a Chief Commissioner, who is required to be legally qualified, and a number of Senior Commissioners and Commissioners who are required to have a knowledge of native customs in relation to land. The function of the Commission is to determine and protect the land rights of the people of Papua New Guinea. Its work largely involves the adjudication of disputes, the determination of boundaries and the registration of customary rights to land.

Under the *Coroners Ordinance* 1953-1963 the Administrator may appoint persons to be Coroners. A Coroner has jurisdiction to inquire into the circumstances of the death of a person who dies in unusual circumstances and into the cause and origin of fires. No action has yet been taken to recognise the jurisdiction of extra-legal indigenous tribunals. Any tribunal other than one established by law is illegal, and the policy is to encourage the people to turn to the proper judicial authority which is provided by statute.

#### *Penalties*

The maximum penalties which may be imposed by the Courts are stated in the ordinances and regulations under which the charges are laid. The penalties so specified are the same for all sections of the population, but in imposing a penalty in any particular case the Courts take into account the background of the offender and the circumstances in which the offence was committed. Accordingly the Courts have agreed in sentencing

Papua New Guinean offenders to the extent of their contact with and understanding of the law.

Capital punishment by hanging is the penalty for wilful murder, treason, and certain kinds of piracy, but, in the case of a person convicted of wilful murder, the Court may substitute imprisonment for life or a lesser term if it considers there are extenuating circumstances such that it would not be just to inflict the punishment of death. This is decided in the light of the facts of, and the circumstances of and surrounding each case. If the Court is of the opinion that the offender should be recommended for the Royal Mercy it may abstain from pronouncing the death sentence and instead merely order judgment of death to be entered on record. Powers of clemency are vested in the Governor-General in respect of persons sentenced to death and the Administrator in respect of other persons. In practice no execution may be carried out until all the circumstances of the case have been considered by the Administering Authority. During the period under review sentence of death was pronounced on one convicted murderer. No death sentence has been carried out since 1957.

The only offences for which corporal punishment may be imposed in the case of adults are those indictable offences for which such punishment is specifically authorised by the Criminal Code, including sexual offences against females, and certain crimes of particular violence. The power to impose corporal punishment for these offences belongs to the Supreme Court; it is rarely exercised and has not been exercised at all in recent years. Corporal punishment may not be imposed on a female.

The existing legislation providing for corporal punishment has been under review for some time but the Government of Papua New Guinea has not made any decision on the question, which is bound up with other matters which are being dealt with in a review of the criminal code.

Children's Courts are not empowered to impose corporal punishment but where offenders are under the age of 14 years, the Court may, without proceeding to a formal conviction and punishment, dismiss a charge upon being satisfied that suitable chastisement has been inflicted on the child by its guardian.



The *Criminal Law (Restriction of Movement) Ordinance* 1962 provides that, when a person is convicted on indictment of any offence, the Court may prohibit the movement of that person into a specified area of Papua New Guinea or order that he be deported to and remain in a part of the country specified by the Administrator-in-Council for such period as the Court specifies.

The *Public Order Ordinance* 1970 provides that a Court may order a person who has committed or is likely to commit a breach of the peace, who has incited, urged, aided or encouraged another person to commit an offence or a breach of the peace or whose public utterances, publications or conduct are calculated to be prejudicial to the preservation of peace or public order to enter into a recognisance to be of good behaviour or to keep the peace. Where the Court considers it advisable for the preservation of peace and public order that the person should not be permitted to be in an area declared by the Administrator-in-Council to be in an area where public processions and meetings shall not be organised without a permit from the Administration or, having regard to the person's past conduct, that he should not be permitted to remain in that part of Papua New Guinea in which the conduct which gave rise to the order occurred. The recognisance may include a condition that the person remain within or without a specified area of Papua New Guinea for such period as the Court thinks proper.

In the case of a person born in Papua New Guinea no such condition shall require him to remain outside his home district. Before making such a condition the Court must also satisfy itself that the person will not thereby be prevented from supporting himself and his dependants, that he will be at liberty to reside in at least one subdistrict in which he has a home and where he is to be ordered to remain within a specified area, that his presence there will not be prejudicial to the preservation of peace and public order within that area.

Deportation may not be imposed as a penalty, but under the *Migration Ordinance* 1963-1969, the Administrator-in-Council may, subject to certain conditions, order the deportation of a person not born in Papua New Guinea who has been convicted of a criminal offence punishable by imprisonment for one

year or longer or who is not a fit and proper person to be allowed to remain in the country.

Under the *Removal of Prisoners (Territories) Act* 1923-1968 of the Commonwealth of Australia, expatriate prisoners may be removed from Papua New Guinea to serve their sentences in a prison in Australia. In no circumstances may a Papua New Guinean prisoner be sent outside Papua New Guinea to serve his sentence.

Juvenile offenders, who are a relatively small class and are mostly convicted of petty theft or housebreaking, are given separate opportunities for corrective instruction and general improvement.

The penalties prescribed in the criminal law of Papua New Guinea are maxima and any lesser penalty may be imposed by a Court. In place of a sentence of imprisonment for life a Court may impose imprisonment for a term of years and instead of a sentence of imprisonment it may impose a fine.

*Conditional Release.* A person convicted of any offence not punishable with death, instead of being sentenced to any punishment to which he is liable, may be released upon his own recognisance, with or without sureties in such amount as the Court directs, that he shall be of good behaviour for a time fixed by the Court, or come up for sentence when called upon.

The criminal code empowers the Administrator to release a person serving a sentence of imprisonment upon licence subject to such conditions as are prescribed in the licence.

#### *Training*

Two courses for the training of magistrates are conducted by the Administrative College. One of these courses aims at training men of mature age and standing in their local areas in the principles of law which are applied in Local Courts. The other course trains younger men of a higher educational standard with a view to ultimately securing their appointment to higher magisterial positions. During the year under review, two police prosecutors undertook one of these courses. A number of graduates of these courses have been appointed Local Court Magistrates.

#### *Official Language*

English is the official language of the Courts. However, evidence, etc., may be given in another language, in which case it is

translated into English for the Court. Court interpreters are employed as necessary to assist the Presiding Judge or Magistrate. While no statutory qualifications are prescribed in practice, considerable experience, a good educational background and competence in the relevant languages are sought in interpreters.

#### *Legal Profession*

The Admission Rules under the *Legal Practitioners Ordinance* 1954-1971, provide that a Barrister or Solicitor of the High Court of Australia or the Supreme Court of any State or Territory may be admitted to practice in Papua New Guinea. Other persons desiring to be admitted must first register as students-at-law and satisfy certain academic requirements and professional qualifications. There are 99 practitioners of whom 4 are Papua New Guinean practitioners.

#### *Fees*

Court fees are on a moderate scale and in general are related to the amount at issue in the particular case. No fees are chargeable and no legal or professional costs are granted in Local Courts.

#### *Legal Aid*

Under the *Poor Persons' Legal Assistance Ordinance* 1951 any person without adequate means to provide legal assistance for himself may, with the concurrence of the Judge, be granted such assistance if on trial for an indictable offence.

The office of the Public Solicitor provides representation by qualified legal practitioners to persons, both indigenes and expatriates, who are unable to afford representation by a private legal practitioner in all Supreme Court criminal trials. In addition the Public Solicitor's office provides legal representation to all impecunious persons for appeals to the Supreme Court and the Full Court, both in civil and criminal proceedings, and so far as staff permits, in litigation before the Land Titles Commission, in civil proceedings before the Supreme Court, and in proceedings before the lower courts. When an applicant for legal aid has sufficient means to make other than a trivial contribution towards the cost involved, the Public Solicitor makes a charge for his services having regard to the financial capacity of the applicant.

#### *Equality of Treatment Before the Law*

One of the basic principles of English law is equal treatment of all in the Courts, irrespective of race or nationality, and this principle is observed throughout Papua New Guinea. Papua New Guineans have the right of free recourse to the Courts and are guided in such matters by officers of the Division of District Administration and by the Public Solicitor, whom they may approach on any matter.

## CHAPTER 8

### LEGAL SYSTEM

#### *General*

The main source of the law of Papua New Guinea is the *Papua New Guinea Act* 1949-1971 of the Commonwealth of Australia. Article 4 of the Trusteeship Agreement for the Trust Territory of New Guinea confers on the Administering Authority the same powers of legislation in and over New Guinea as if it were an integral part of Australia, and entitles the Administering Authority to apply there, subject to such modification as it deems desirable, such laws of Australia as it deems appropriate to the needs and circumstances there. The Papua New Guinea Act authorises the House of Assembly, subject to the Act, to make Ordinances for the peace, order and good government of Papua New Guinea.

Under the Papua New Guinea Act, and in accordance with the Trusteeship Agreement for New Guinea, all laws in force there immediately before the date of commencement of the Act, i.e. 1 July 1949, were continued in force, subject, however, to their subsequent amendment or repeal by ordinances made in pursuance of the Papua New Guinea Act. The laws so continued in force comprised:

- (i) Ordinances made under the *New Guinea Act* 1920-1935; and
- (ii) Ordinances made under the *Papua-New Guinea Provisional Administration Act* 1945-1946.

One of these ordinances, the *Laws Repeal and Adopting Ordinance* 1921-1952, adopted the following laws to the extent that they are applicable to the circumstances in Papua New Guinea and not inconsistent with any other law there:

- (i) certain Acts of the Australian Parliament;

- (ii) certain Acts and Statutes of the State of Queensland;
- (iii) such of the Acts, Statutes and laws of England as were in force in the State of Queensland on 9 May 1921;
- (iv) certain Ordinances of the Territory of Papua; and
- (v) the principles and rules of common law and equity that were in force in England on 9 May 1921.

In addition to laws which derive from the above sources, certain other laws apply in Papua New Guinea:

- (i) certain Imperial Legislation; and
- (ii) Commonwealth Acts which are expressed to extend to Papua New Guinea.

In general, the legal system—whether civil, criminal or administrative—follows both the principles and practices of the legal systems of England and of the Australian States.

Under the *Papua New Guinea Act 1949-1971* laws in force in Papua New Guinea at the commencement of the Act were continued in force. The laws so continued in force include:

- (i) laws adopted by the *Courts and Laws Adopting Ordinance 1889-1951*;
- (ii) Ordinances made pursuant to the *Papua Act 1905-1940*; and
- (iii) Ordinances made under the *Papua-New Guinea Provisional Administration Act 1945-1946*.

The Council of Law Reporting, formed in September 1962, has brought out five volumes of the Papua and New Guinea Law Reports.

#### *Traditional Law and Custom*

The *Laws Repeal and Adopting Ordinance 1921-1952* provides that the tribal institutions, customs and usages of Papua New Guineans shall not be affected by that Ordinance, and shall, subject to the provisions of the Ordinances of Papua New Guinea from time to time in force, be permitted to continue in existence insofar as the same are not repugnant to the general principles of humanity.

The *Native Customs (Recognition) Ordinance 1963* provides that native custom shall be recognised and enforced by, and may be pleaded in, all courts, except insofar as, in a particular case or context, it is repugnant to the general principles of humanity, is inconsistent with an enactment in force in Papua New Guinea, is against public interest, or is not in the best interests of a child.

Under the *Local Courts Ordinance 1963-1966* a local court has jurisdiction to hear matters arising out of and regulated by traditional custom.

Under the *Local Government Ordinance 1963-1971*, a local government council may:

- (i) and on the request of a court shall, appoint a committee consisting of persons who have knowledge of customs to advise and report on customs in relation to any matter in the council area; and
- (ii) from time to time make recommendations to the Administrator concerning the enforcement, variation or abolition of any traditional custom in the council area.

During 1970-71 no recommendations to the Administrator under section 57 of the *Local Government Ordinance 1963-1971* were made by any local government council concerning the enforcement, variation or abolition of any traditional custom. Seven councils enacted customary marriage settlement rules which varied custom by setting a maximum payment in relation to marriage settlements and also provided for registration of those settlements with the council. This brought the total number of marriage settlement rules enacted by councils in Papua New Guinea to date to 39. Apart from those mentioned one council has passed land use records rules, one has passed customary social obligation rules and one has passed village celebrations rules.

An act of a local government council (including a rule) cannot be held invalid or beyond the powers of the council merely because it regulates the exercise of a local custom, other than one relating to ownership or possession of traditional land or the devolution of property.

## PART VI. ECONOMIC ADVANCEMENT

### Section 1. Finance of Papua New Guinea

#### CHAPTER 1

### PUBLIC FINANCE

#### *Ministerial Responsibility*

During the year under review, the Papua New Guinea Ministry exercised full authority and final responsibility in respect of internal revenue (excluding protective tariffs), management of the public debt and price control. The Administering Authority retained responsibility for the currency, banking, insurance and other financial institutions; the Investment Corporation and the Development Bank; the National Development Programme; external aid; protective tariffs and auditing of Government accounts.

During the life of the Second House of Assembly financial matters fell within the responsibilities of the Assistant Ministerial Member for the Treasury, Mr Oala Oala Rarua, MHA. The Minister responsible for these matters to the Third House of Assembly is the Minister for Internal Finance, Mr Julius Chan, MHA.

#### *Legislation*

As mentioned in Part III of this Report, New Guinea and Papua are governed in an administrative union as Papua New Guinea. Legislation relating to public finance applies equally to both.

The basic legislation governing the budget of Papua New Guinea is covered in the *Papua New Guinea Act 1949-1971* of the Commonwealth of Australia. The Act provides that:

(i) the revenue of Papua New Guinea shall be available for defraying the expenditure there;

(ii) the receipt, expenditure and control of revenues and moneys there shall be regulated as provided by ordinance;

(iii) no revenue or moneys there shall be issued or expended except under appropriation made by law and except by warrant under the hand of the Administrator;

(iv) the accounts of Papua New Guinea shall be subject to inspection and audit by

the Auditor-General of the Administering Authority; and

(v) there shall be expended in each year, upon the administration, welfare and development of New Guinea, an amount which is not less than the total amount of public revenue raised in that year there.

Supporting legislation is provided in the *Treasury Ordinance 1951-1971* which governs procedures for the receipt, expenditure and control of revenue and moneys of Papua New Guinea. Moneys are expended only under authority of an appropriation ordinance passed by the House of Assembly.

#### *Budget*

In conformity with statutory requirements the Treasurer annually prepares estimates of revenue and expenditure before the commencement of the financial year to which these relate. The estimates are presented by the Treasurer to the Administrator in Council. If approved, negotiations then follow between Papua New Guinean Ministers and the Minister of State for External Territories and the amount of grants is determined by the Australian Government. When the estimates of revenue are thus fixed the details of expenditure are then presented to the House of Assembly in the form of an appropriation bill. This bill is debated by the House of Assembly and, if approved, is passed as an appropriation ordinance.

The revenues of Papua and of New Guinea are recorded separately. In future, expenditure will not be recorded separately for Papua and for New Guinea. However, a certification that an amount at least equalling the revenue raised in New Guinea has been spent in New Guinea will be made at the end of each financial year.

The revenues raised within Papua New Guinea are derived chiefly from import tariffs and direct taxation, and in 1971-72, excluding loan raisings, amounted to \$95,253,382. A comparison is made in Appendix IV of the various heads of revenue and expenditure for Papua New Guinea for the last 5 years. Expenditure for each year by the government on welfare and development has substantially exceeded the public revenue raised there.

Revenues and expenditure from and on behalf of Papua New Guineans are not recorded separately. The balance, however, is heavily weighted on the side of expenditure incurred for the benefit of Papua New Guineans, as will be seen from the details furnished in Appendix IV and the references made in this Report to the social, medical, educational, agricultural and other services provided throughout Papua New Guinea.

In 1970-71 there were changes in the pat-

tern of Australian aid which now takes the forms of:

- (i) a basic grant-in-aid to assist in meeting the costs of recurrent expenditures and minor works;
- (ii) a separate grant in respect of developmental activities;
- (iii) development grants; and
- (iv) additional allowances and benefits for overseas officers of the Public Service (payable outside the Papua New Guinea budget).

| Item   | 1968-69           | 1969-70           | 1970-71            | 1971-72            |
|--|-------------------|-------------------|--------------------|--------------------|
|  | \$                | \$                | \$                 | \$                 |
| Grant towards expenses, including native welfare and development .. .. .                           | 86,993,674        | 95,999,470        | ..                 | ..                 |
| Additional capital for Papua New Guinea Development Bank .. .. .                                   | ..                | 1,000,000         | ..                 | ..                 |
| Grant-in-aid to Administration .. .. .   | ..                | ..                | 32,999,683         | 29,999,990         |
| Development grant .. .. .  | ..                | ..                | 36,999,999         | 39,874,999         |
| Allowances and other benefits for overseas officers of the Papua New Guinea Public Service .. .. . | ..                | ..                | 31,497,194         | 38,293,908         |
| Australian School of Pacific Administration .. .. .  | 258,500           | 286,304           | 320,577            | 354,364            |
| New Guinea and Papua Superannuation Funds .. .. .  | 277,612           | 271,451           | 264,975            | 384,934            |
| Decimal currency—Machine conversion and adjustment .. .. .   | 4,995             | 4,741             | ..                 | ..                 |
| Permanent demarcation of border .. .. .  | 1,661             | ..                | ..                 | ..                 |
| Overseas Service Bureau—Grant .. .. .  | 34,462            | 32,800            | 38,007             | 34,930             |
| Council on New Guinea Affairs—Grant .. .. .  | 11,000            | 12,000            | 7,666              | 8,000              |
| South Pacific Games (1969) Trust—Grant .. .. .   | ..                | 145,809           | ..                 | ..                 |
| Practical training in Australia for Papuans and New Guineans .. .. .                               | ..                | ..                | 78,379             | 238,227            |
| Flying Training Scholarships—Grant .. .. .   | ..                | ..                | ..                 | 11,676             |
| Bureau of Industrial Organisations—Grant .. .. .   | ..                | ..                | ..                 | 50,000             |
| Expenses of Papua New Guineans attending the A.S.O.P.A. .. .. .                                    | ..                | ..                | ..                 | 86,072             |
| <b>Total .. .. .</b>   | <b>87,581,904</b> | <b>97,752,575</b> | <b>102,206,480</b> | <b>109,337,100</b> |

The Estimates of Receipts and Expenditure of the Administering Authority specifically record the items of financial assistance to Papua New Guinea for the last 4 years as shown in the table above. In addition, the Administering Authority spends considerable sums each year on essential works and services in Papua New Guinea. Australian departments, the Australian Broadcasting Commission and the Commonwealth Scientific and Industrial Research Organisation spent in 1971-72 approximately \$35.5m.

Papua New Guinea has no administrative, fiscal or customs union with any neighbouring territory and no preference on imported goods is given in the Customs Tariff there.

#### Loans

The loan programme for Papua New Guinea was achieved by the use of 2 types of loan raising: private treaty loans and premium

and savings securities. The 1971-72 loan programme raised \$25,540,440.

The fifteenth series of premium securities to provide funds for public works and services opened on 18 February 1971 and closed on 11 December 1971 and at 30 June 1972 securities to the value of \$473,350 were on issue.

The first series of savings securities was opened for public subscription on 20 December 1971 and at 30 June 1972 an amount of \$391,130 had been subscribed. Savings securities, which have replaced premium securities, have no rates of capital appreciation, interest payments being the only return on investment.

Papua New Guineans subscribed approximately \$400,000 during the year compared with \$350,000 in 1970-71.

Private treaty loans had raised \$24,759,800 for works and services by the end of the year

Under the *Loan (Arawa Town Works) Ordinance 1970-1971* the Papua New Guinea Government was authorised to borrow from the Australian Government up to \$20m for the carrying out of works in the town of Arawa on Bougainville Island. During 1971-72 the balance of the loan outstanding amounting to \$11.7m was drawn.

International Loan receipts in 1971-72 totalled \$8,130,734. Under the IBRD Loan No. 546 PNG \$2,177,436 was received for the upgrading of telecommunications in Papua New Guinea. Under IDA Credits Nos. 137 PNG and 175 PNG \$829,561 was received for the development of oil palms and for cattle development. Amounts of \$3,153,580 and \$1,179,277 were received under IDA Credit No. 204 PNG and IBRD Loan No. 693 PNG respectively for the construction and upgrading of highways in the New Guinea Highlands. The Government also entered into a further loan agreement with the IBRD (IBRD Loan 737 PNG) for the construction of Stage 1 of the Ramu Hydro-Electric Scheme. At 30 June 1972 \$790,879 had been received under this loan.

At 30 June 1972 the public debt of Papua New Guinea amounted to \$136,131,392. This was made up of \$12,186,172 in loan money from international organisations and \$123,945,220 from Australian and local sources under the loan programme.

Provision for payment of interest is made through Special Appropriations from the Budget. Provision for repayment of principal may similarly be by Special Appropriations from the Budget, or from the PNG Sinking Fund.

## CHAPTER 2 TAXATION

### *General*

The types of taxation imposed in Papua New Guinea include customs and excise duties, income tax, personal and local government council taxes, stamp and succession duties and registration fees.

No hut, land or cattle taxes are imposed. All taxes must be paid in money.

### *Customs Duties*

Customs revenue accounts for a considerable part of local revenue. Customs matters are regulated under the *Customs Ordinance 1951-1959*, and duties on imports are prescribed by the *Customs Tariff 1959-1971*.

### *Import Duties and Charges*

Import revenues for the 4 years from 1 July 1968 to 30 June 1971 were:

|                  | 1968-69    | 1969-70    | 1970-71    | 1971-72    |
|------------------|------------|------------|------------|------------|
| Papua New Guinea | 12,083,602 | 17,011,468 | 22,729,005 | 23,967,563 |

A general import levy at the rate of 2.5 per cent of the value of imported goods was introduced in 1970-71.

Details of classified imports and exports, with values are given in Appendix VII, Tables 1 to 5.

### *Excise Duties*

Excise is regulated under the *Excise (Beer) Ordinance 1952-1960* and the *Excise Ordinance 1956-1971*. Excise duties are prescribed by the *Excise Tariff Ordinance 1956-1971*.

The rates of excise duty current at 30 June 1972 were 85 cents a gallon on beer, 75 cents per pound on twist tobacco and \$3.30 a pound on cigarettes.

### *Income Tax*

*Legislation.* The imposition, assessment and collection of a tax upon incomes in Papua New Guinea are regulated by the *Income Tax Ordinance 1959-1970*, the *Income Tax (Rates) Ordinance 1968* and the *Income Tax Regulations 1959*, as amended.

*Scope of Income Tax.* In general, income assessable for income tax purposes, includes all income derived directly or indirectly from sources in Papua New Guinea and, in the case of resident taxpayers, unless expressly exempt, from sources outside Papua New Guinea.

For the purposes of the tax, the word 'income' is used in its ordinary sense and also includes certain other receipts declared by the *Income Tax Ordinance* to be assessable income. Receipts such as gifts (other than gratuities given by the employer to an employee in the course of his employment), legacies, profits from sale of property (unless acquired for the purposes of profit making by sale), lottery wins and most capital gains are not regarded as assessable.

The ordinance sets out certain kinds of income which are exempt from tax, e.g., the income derived from gold-mining.

Although a partnership is required to furnish a return of income it is not liable to pay tax on that income. The assessable income of a partner includes his individual interest in the net income of the partnership. His share of a partnership loss is an allowable deduction.

Income tax is assessed on both taxable income and chargeable income. Whichever liability is the larger is the tax due.

**Taxable Income.** Taxable income is the amount remaining after deducting from the assessable income all deductions allowable under the ordinance. The allowable deductions fall into three main categories:

(i) expenses incurred in gaining or producing assessable income or necessarily incurred in carrying on a business for that purpose, except to the extent that such expenditure is an outgoing of capital or is of a capital, private or domestic nature, or is incurred in gaining exempt income;

(ii) special deductions such as bad debts, expenses of borrowing, trading losses incurred in previous years by primary producers or over the previous seven years by non-primary producers, and gifts to certain institutions. Primary producers may claim a deduction for capital expenditure which will bring land into production or improve the productive qualities of land already in use. Certain other deductions are allowable for those engaged in the timber and mining industries; and

(iii) concessional deductions, i.e., family and personal allowances granted to resident taxpayers, including:

(a) deductions of the amounts indicated for the following dependants:

|  | \$  |
|--|-----|
| Spouse . . . . .                             | 460 |
| Daughter-housekeeper . . . . .               | 460 |
| Child of less than 16 years of age . . . . . | 260 |
| Student child . . . . .                      | 260 |
| Invalid relative . . . . .                   | 260 |
| Parent . . . . .                             | 460 |

(b) certain domestic and private expenditure, such as medical expenses and life insurance premiums. Leave fares are deductible in the case of self employed persons; and

(c) personal allowance of \$572.

**Chargeable Income.** Chargeable income is the amount remaining after deducting from the assessable income all deductions allowable

under the ordinance other than deductions for subscriptions to associations, calls by mining or afforestation companies, gifts and concessional deductions.

The ordinance provides that

(i) tax shall not be imposed on a chargeable income which does not exceed \$416, and

(ii) where a taxpayer must pay income tax and also local government tax, the local government tax paid, up to a maximum of \$10, is allowed as a rebate against the income tax payable for the same year. If the local government tax paid exceeded \$10, the excess may be claimed as a deduction in calculating the taxable income or the chargeable income, as the case may be, for that particular year.

**Returns and Assessments.** Individuals with assessable income in excess of \$416 and all partnerships, companies and trustees are required to lodge returns of income. However, Australian residents (including companies) whose income from Papua New Guinea sources is confined to dividends, interest and/or pensions, are not required to lodge Papua New Guinea returns of income on the understanding that such income will be included in their Australian returns.

The amount of income tax payable on the taxable income of an individual taxpayer is calculated at graduated rates laid down in the Income Tax (Rates) Ordinance appropriate to the financial year. The rates applicable to income derived during the year ended 30 June 1971 are set out in Table 1 of Appendix V as follows:

(i) general rates of income tax on taxable income payable by persons other than companies;

(ii) rates of income tax on taxable income payable by a company other than a company in the capacity of a Trustee; and

(iii) rates of income tax in respect of chargeable income.

Companies, with the exception of non-profit companies, are assessed for tax if the taxable income is \$1 or more. Non-profit companies are not liable to tax unless the taxable income exceeds \$208.

Rebates allowed under the various sections of the Income Tax Ordinance and any credits are deductible from the tax as calculated on the taxable or chargeable income. Credits

arise in cases where tax has been paid in the country of its origin on assessable income derived from sources outside Papua New Guinea.

*Objections and Appeals.* Machinery is provided in the Income Tax Ordinance for the lodgment of objections to assessments. A taxpayer dissatisfied with the decision on an objection may request reference of the decision to the Review Tribunal or, alternatively, may request that the objection be treated as an appeal to be forwarded to the Supreme Court.

*Payment of Tax.* A salary or wage earner has tax instalments deducted from his pay by his employer who remits this money to the Taxation Office. In respect of business investment, and other non-salary and non-wage income, the counterpart of tax instalment deductions is provisional tax. Tax instalment deductions and provisional tax are the essential elements of the pay-as-you-earn system of income taxation in Papua New Guinea. In each case the amount of tax instalment deductions or provisional tax paid in respect of a particular year is credited against the amount of tax subsequently assessed for that year. The taxpayer is required to pay to the Taxation Office any balance owing, or receives a refund of any excess.

#### *Local Government Council Tax*

Under the *Local Government Ordinance* 1963-1971 a Council may levy within its area rates and taxes which are payable to the Council treasury account. Grounds for exemption from or reduction of tax are set out in Chapter 3 of Part V and information concerning taxes levied by Councils during 1969-70 is given in Appendix II Tables 8 and 10.

#### *Local Authorities*

The budgetary system and procedures of local government councils are described in Chapter 3 of Part V of this Report.

#### *Stamp Duties*

Under the *Stamp Duties Ordinance* 1952-1967 certain instruments are liable for duty. They include bills of exchange, promissory notes, conveyances or transfers on sales of real property, leases, receipts, bills of lading, deeds of settlement or gift, memoranda and articles of association of companies, transfers of marketable securities, powers of attorney and certain policies of insurance.

Duties are assessed at a fixed or *ad valorem* rate depending on the type of instrument, and payable by stamps affixed or impressed upon the documents involved.

Provision is made in the Ordinance for fines to be imposed for evasion of stamp duty and for penalties in the form of increased duty for late submission of documents.

## *Section 2. Money and Banking*

### CHAPTER I

## CURRENCY AND BANKING SYSTEM

### *Currency*

Australian notes and coins circulate in Papua New Guinea under the provisions of the *Currency Ordinance* 1965 of Papua New Guinea and the *Australian Reserve Bank Act* 1959-1966. The Currency Ordinance specifies Australian currency as legal tender in Papua New Guinea.

Foreign exchange is controlled by the Australian Banking (Foreign Exchange) Regulations. These regulations impose no restriction on payments between Papua New Guinea and Australia. As Papua New Guinea uses Australian currency, the exchange rate and restrictions on exchange transactions with other countries are the same as those applicable to similar transactions between Australia and those countries.

Following a major realignment of world currencies, the Australian Prime Minister announced in December 1971 that the market rate for the Australian dollar would be fixed on the U.S. dollar at a midpoint market rate of \$US1.1910 equals \$1 Australian. Under the common currency arrangement, this rate was automatically applied to Papua New Guinea.

### *Banking*

At the present time, control of the Papua New Guinea banking system rests with the Administering Authority's monetary authorities. All banking operations in Papua New Guinea are regulated by Australian Acts, namely, the *Banking Act* 1959-1967, the *Reserve Bank Act* 1959-1966 and the *Commonwealth Banks Act* 1959-1968. The only local ordinance relating to banking is the *Papua and New Guinea Development Bank Ordinance* 1965-1969.



The Reserve Bank of Australia, which has an office in Port Moresby, provides inter alia, banking and other financial services to the Papua New Guinea Government and to the banks operating in Papua New Guinea. In addition the Reserve Bank has been involved in the development of central banking in Papua New Guinea, the financial education of Papua New Guineans, the development of the Savings and Loan Societies movement and the encouragement of greater localisation of bank staff.

Four of the major Australian banks are represented in Papua New Guinea—the Commonwealth Banking Corporation, the Australia and New Zealand Banking Group Limited, the Bank of New South Wales and the National Bank of Australasia Limited. These banks conduct both trading and savings banking operations.

The Commonwealth Banking Corporation, an Australian Government-owned Bank, is the most important of the four Australian banks operating in Papua New Guinea. The Corporation has the largest share of trading and savings business in Papua New Guinea. Seventy per cent of Papua New Guinean deposits are held with the Commonwealth Savings Bank.

The levels of deposits and advances of cheque paying banks in 1971 and 1972 and deposits by savings banks at 30 June 1971 and 1972 in Papua New Guinea are shown in the tables below. Interest rates applying in Papua New Guinea at 30 June 1972 are detailed in Appendix VI.

The Savings and Loan Societies movement, a credit union organisation which was commenced in 1962, had by the end of June 1972 a total of 314 societies and 269 clubs with funds amounting to \$1.8m.

In May 1971 the Papua New Guinea Investment Corporation was established with the aim of providing a means by which Papua New Guineans may obtain a share in the ownership and control of major overseas investment projects in the country. To 30 June 1972 the Investment Corporation had invested in four major businesses and the purchase of shares in several others is under consideration.

The public loans of Papua New Guinea are raised by subscriptions to private treaty loans and savings securities. In 1971-72 \$25.5m was raised in Papua New Guinea by these means.

#### BANK DEPOSITS

| Particulars                                    | New Guinea           |                      | Papua                |                      |
|--|----------------------|----------------------|----------------------|----------------------|
|  | Average<br>June 1971 | Average<br>June 1972 | Average<br>June 1971 | Average<br>June 1972 |
|  | \$'000               | \$'000               | \$'000               | \$'000               |
| Commonwealth and State Government—             |                      |                      |                      |                      |
| (i) Fixed .. .. .                              | ..                   | ..                   | ..                   | ..                   |
| (ii) Current—                                  |                      |                      |                      |                      |
| (a) Bearing interest .. .. .                   | ..                   | ..                   | ..                   | ..                   |
| (b) Not-bearing interest .. .. .               | 2,024                | 2,382                | 72                   | 131                  |
| Other than Commonwealth and State Governments— |                      |                      |                      |                      |
| (i) Fixed .. .. .                              | 6,415                | 5,353                | 4,745                | 5,131                |
| (ii) Current—                                  |                      |                      |                      |                      |
| (a) Bearing interest .. .. .                   | 839                  | 711                  | 803                  | 816                  |
| (b) Not-bearing interest .. .. .               | 20,627               | 19,668               | 11,463               | 12,377               |
| Total .. .. .                                  | 29,905               | 28,114               | 17,082               | 18,454               |
| Savings bank balances at 30 June .. .. .       | 30,689               | 29,306               | 14,101               | 16,379               |

BANK ADVANCES

| Particulars  | New Guinea           |                      | Papua                |                      |
|--|----------------------|----------------------|----------------------|----------------------|
|  | Average<br>June 1971 | Average<br>June 1972 | Average<br>June 1971 | Average<br>June 1972 |
|  | \$m                  | \$m                  | \$m                  | \$m                  |
| Cheque-paying banks—<br>Loans, advances and bills discounted .. .. | 19.9                 | 21.1                 | 75.2                 | 95.8                 |

CHAPTER 2

**PAPUA NEW GUINEA  
DEVELOPMENT BANK**

The establishment of a development bank in Papua New Guinea arose from a recommendation by the visiting mission of the International Bank for Reconstruction and Development (World Bank) in 1964. In its report to the Administering Authority entitled 'The Economic Development of the Territory of Papua and New Guinea', the mission recommended the formation of a development finance company in Papua New Guinea to supplement existing financial institutions in providing medium and long term finance to the private sector on terms and conditions which would meet the requirements of Papua New Guinea. With the acceptance of the mission's proposals by the Administering Authority, the Papua and New Guinea Development Bank Ordinance was passed by the House of Assembly in 1965 and the Bank opened on 6 July 1967. At the end of 1971-72 the Bank had been in business for almost exactly 5 years. In this time it made 7,155 loans and investments aggregating \$27.8m to all sections of the economy.

To date, the capital of the Bank has been provided in the form of grants through the Papua New Guinea Budget. As at the end of the year 1971-72 these grants totalled \$17.1m of which \$16m has been provided by the Australian Government. In addition to this direct assistance, the Bank acquired by transfer from the Government, on 1 January 1969, the assets and liabilities of the former Ex-Servicemen's Credit Board. Similarly, loans extended by the Native Loans Board were taken over by the Bank on 1 April 1969. Repayments made by borrowers from these former Boards are added to the Bank's capital.

The International Development Association has granted credits to the Bank, through the Government, of about \$2.6m for promoting cattle, oil palm and coconut development. In 1971 the Government negotiated with the Asian Development Bank a general purpose loan of \$US4.5m for on-lending to the Papua New Guinea Development Bank.

A further upgrading of the Bank's services to customers took place during the year with the conversion of Regional Offices in Lae and Mt Hagen to full Branch status and, with the opening of a Branch office in Port Moresby, the Bank now has 4 branches. A representative was stationed at Mendi in the Southern Highlands District bringing the total number of representative offices to 10.

*Functions of the Bank*

In the *Papua and New Guinea Development Bank Ordinance* 1965-1969, the main functions of the Bank are defined as:

- '(a) To provide finance for persons—
- (i) for the purposes of primary production; or
  - (ii) for the establishment or development of industrial or commercial undertakings, particularly small undertakings;

in cases, where, in the opinion of the Bank, the provision of the finance is desirable and the finance would not otherwise be available on reasonable and suitable terms and conditions; and

- (b) To provide advice and assistance with a view to promoting the efficient organisation and conduct of primary production or of industrial or commercial undertakings.

It is the duty of the Board, within the limits of its powers, to ensure that the policy of the Bank is directed to the greatest advantage of the people of the Territory and has due regard to the stability and balanced

development of the Territory economy and the advancement of the indigenous population.'

During 1971-72 total loans approved numbered 2,458 for a value of \$8.1m compared with 2,048 for \$4.2m for the preceding year. The most significant increase was in the indigenous sector where loans increased from the previous highest figure of \$2.4m in 1970-71 to \$4.0m, an increase of 67 per cent. This reflects the growing involvement of Papua New Guineans in the cash economy.

The average size of loans to Papua New Guineans for industrial purposes increased by 31 per cent to \$1,200, for commercial purposes by 103 per cent to \$3,054, while average loans for rural enterprises rose by 22 per cent to \$1,427. These increases in average sizes are encouraging evidence of the economic progress of Papua New Guineans.

Agriculture and livestock production continue to be the main avenues for introducing Papua New Guineans into the cash economy and the Bank devotes a major part of its efforts to promoting rural development. However, active measures are also pursued in secondary and tertiary industries. The great impediment to the establishment of Papua New Guinean commercial and industrial enterprises has been and will be for many years, the acute shortage of entrepreneurial experi-

ence and skills. Nevertheless, these sectors are growing and increasingly they serve as their own training ground, fostering not only management skills but also the ability to perceive and take advantage of business opportunities.

The Bank made further loans from IDA credit funds to smallholder settlers in West New Britain for the development of oil palm blocks. In total 400 further loans for \$74,900 were approved bringing the Bank's investment in smallholder blocks for oil palm under IDA refinancing arrangements to 1,560 for a total investment of nearly \$3m.

While the Bank's first and prime responsibility is to assist in the economic development of the Papua New Guinean people it recognises also the important role of expatriate firms in initiating many enterprises, especially in the commercial and industrial fields, vital to developing the Papua New Guinea economy. The Bank is therefore prepared, within the limits of available funds to assist with the development of expatriate projects which create investment, employment and training opportunities for the indigenous people. During the year under review loan approvals to expatriate borrowers increased from \$1.8m in 1970-71 to \$3.7m, while joint enterprise approvals involving expatriate and Papua New Guinean borrowers increased from \$97,000 in 1970-71 to \$481,000 in 1971-72.

#### TOTAL APPROVALS

|                          | 1967-68 |                  | 1968-69 |                  | 1969-70 |                  | 1970-71 |                  | 1971-72 |                  |
|--------------------------|---------|------------------|---------|------------------|---------|------------------|---------|------------------|---------|------------------|
|                          | No.     | Amount<br>'\$000 | No.     | Amount<br>'\$000 | No.     | Amount<br>'\$000 | No.     | Amount<br>'\$000 | No.     | Amount<br>'\$000 |
| Papua New Guinean—       |         |                  |         |                  |         |                  |         |                  |         |                  |
| General .. .. .          | 125     | 123              | 289     | 358              | 823     | 1,014            | 1,684   | 1,907            | 1,866   | 3,253            |
| Land Settlement Scheme   | 297     | 555              | 248     | 464              | 361     | 675              | 254     | 475              | 400     | 749              |
| Total .. .. .            | 422     | 678              | 537     | 822              | 1,184   | 1,689            | 1,938   | 2,382            | 2,266   | 4,002            |
| Expatriate .. .. .       | 66      | 1,207            | 164     | 3,902            | 220     | 2,878            | 103     | 1,764            | 181     | 3,664            |
| Joint enterprise .. .. . | 10      | 366              | 13      | 392              | 18      | 346              | 7       | 97               | 11      | 481              |
| Total loans approved     | 498     | 2,251            | 714     | 5,116            | 1,422   | 4,913            | 2,048   | 4,243            | 2,458   | 8,147            |
| Investments .. .. .      | 2       | 1,500            | 4       | 122              | 4       | 1,336            | 3       | 138              | 2       | 28               |
| Total finance approved   | 500     | 3,751            | 718     | 5,238            | 1,426   | 6,249            | 2,051   | 4,381            | 2,460   | 8,175            |

The above figures show something of the Bank's operations during its first five years. Throughout, the prime objective has been to promote the development of successful indigenous enterprise and it may be of interest to review briefly the Bank's experience of lending in the Papua New Guinean sector, where

the Bank has had to evolve policies and techniques adapted to the Papua New Guinea environment.

At the beginning, there was little understanding of the use of credit to accelerate development and the effective demand for loans from Papua New Guineans was very

low. This is reflected in the results of the first year's operation when, excluding the large oil palm land settlement scheme, Papua New Guinean lending amounted to only \$123,000. The corresponding figure in the fifth year was \$3,253,000, representing a quite substantial rate of growth. The momentum has been well sustained and while it is still necessary to 'sell' the Bank's services, it does seem clear that the ready availability of supervised credit can be a powerful motivator of economic development.

Land tenure presented a particular problem in that most land in Papua New Guinea outside of the towns is owned by clans according to traditional custom. There are no formal titles to such land, making it impossible to take conventional mortgage security. The Bank recognised that if large scale rural development were to be stimulated, it would have to extend credit for the development of clan land. The situation was met by having clan leaders complete morally binding agreements to vest usage rights in one or more of their members to develop a particular piece of land. This can only be used where all clan members are agreeable, and sad to say there are many areas where disputes amongst the clans are impeding progress. However, it is proving effective on an increasing scale and loans approved for clan land amounted to about \$1.5m in 1971-72.

In the light of recorded experience in other countries, clan land lending could be regarded as venturesome. Its success rests heavily, in fact almost entirely, on the degree and quality of technical advice and the effective working relationship of the Bank and the people to enable them to fulfil their potential. Experience to date indicates that technical advice is a far more important factor in ensuring success than formal security and the Bank has been fortunate that the rural officers of both the Department of Agriculture and the Bank's own staff, are of sufficiently high calibre to make this policy feasible.

Another feature of lending for rural development has been the lack of cash equity by the borrowers. To overcome this problem, programmes are drawn up for borrowers to contribute their own labour to their projects prior to and during disbursement of the loans. This use of labour to provide 'equity' has worked well and given the enthusiastic response of the people serves as a effective screening of potential borrowers.

The above principal has been extended into promoting commercial and industrial enterprise where a Papua New Guinean borrower's experience and work record often constitute the most important contribution to his 'equity'. It is perhaps even more important with these enterprises than in rural development there should be a close working relationship between borrowers and technical advisers who are mainly extension officers of the Department of Business Development.

It proved necessary to establish a Projects Department within the Bank for the more effective use of its technical staff and to seek to initiate new commercial and industrial ventures. This has led to the Bank's direct involvement in the operation of several enterprises while training Papua New Guinean proprietors to take over. Although costly, the results are encouraging and it is also providing valuable experience for promoting further Papua New Guinean entrepreneurs.

Experience to date indicates that the situation in respect of repayments is basically sound. The people generally have accepted readily the need to repay loans, both as a personal obligation and in recognition that money borrowed must be returned to the Bank as soon as possible so that the Bank can lend it again to other borrowers. Nevertheless, with the population so scattered and the people not fully accustomed to the concept of paying regular amounts on regular dates, collection of repayments, has been a continual and growing problem. At 30 June 1972 arrears of small Papua New Guineans' loans totalled some 7 per cent of the loan balances. The constant work needed to contain this problem is a costly part of the Bank's overhead.

After five years, the Bank is firmly established with its operations oriented always in the interests of the country. Much remains to be done but already it can be said that the Bank has made a significant contribution to the development of Papua New Guinea.

### *Section 3. Economy of Papua New Guinea*

#### CHAPTER 1

#### GENERAL

##### *General Situation*

During 1971-72, the basis of the economy of Papua New Guinea continued to be primary production, but the importance of agriculture declined while that of mining increased, and

can be expected to continue to increase in the future. The value of output of rural industries (other than subsistence production) fell from \$62m in 1970-71 to \$50m in 1971-72. This was due mainly to falling world prices for copra, cocoa and coffee. The value of mining output, however, increased from under \$1m in 1970-71 to over \$32m in 1971-72, due to commencement of production by Bougainville Copper Pty Ltd ahead of schedule on 1 April 1972. The Bougainville project produced concentrate containing copper, gold and silver valued at an estimated \$32m in the final three months of 1971-72.

In the initial years, the Bougainville mine has a projected annual rate of extraction of about 600,000 short tons of copper concentrate per year containing almost 200,000 short tons of copper, 700,000 ounces of gold and 1.4 million ounces of silver. Based on current prices for these minerals and current sales contracts the value of Bougainville copper concentrate exports will be about \$160m in 1972-73; however, the recent trend in the gold prices could lift these earnings by up to \$20m per year.

Negotiations with the International Development Association are well under way to provide Papua New Guinea with a credit in excess of \$9m for the development of indigenous smallholder livestock projects. These will go a long way to making Papua New Guinea self-sufficient in beef, pigs and poultry products. Pig projects envisage some 500 piggeries making maximum usage of local building materials and foodstuffs. The poultry projects involve about 250 small poultry farms. Some 2,000 smallholder cattle projects are also envisaged.

Marine products output during 1971-72 increased to \$5m. A feasibility study is currently in progress to analyse the prospects of establishing in Papua New Guinea a major tuna fishing operation including a canning complex, in association with foreign interests. Besides substantially increasing marine products output, the proposed venture would provide significant employment opportunities for Papua New Guinea in personnel.

The value of forestry products increased slightly to about \$17m for 1971-72. A slowdown in the Japanese market caused a decline in exports and affected the development of major commercial forestry projects. The reforestation programme continued during 1971-72 at a rate of about 2,000 acres per annum, but it has been hampered by difficulties with

land acquisition for forestry activities. Forestry products output can be expected to increase in future as new proposed major projects are implemented. Such projects include the Gogol Valley (Madang District), production in which is expected to begin in 1973, and Open Bay (East New Britain District), both of which are at the negotiations stage.

Manufacturing output in money terms increased from \$92m in 1970-71 to \$102m in 1971-72, composed of: Engineering sector \$35m; food, drink and tobacco sector \$26m; timber processing industries \$18m; and other industries \$23m. The establishment of manufacturing industries is fostered by a number of incentives such as special taxation concessions—notably the *Industrial Development (Incentive to Pioneer Industries) Ordinance 1965-1969*. The 1971-72 financial year saw considerable diversification of the country's industrial base. In the engineering field, manufacture of aluminium products such as window and door frames, curtain walls, flyscreens, flydoors etc. began; manufacture of aluminium boats and ships propelled by water jet units; manufacture of communications equipment and assembly of transceivers is commencing; manufacture of steel office furniture (other than chairs and tables) and production of freezer units has also started. In the food processing group, production of instant nutritious beverages, jelly crystals and sweet and cracker biscuits commenced. Other industries which came into production were the manufacture of clothing (on a large scale), thongs and stationery. As the Minister for Internal Finance, Mr Julius Chan MHA noted in his Budget Speech for 1972-73 'The economic outlook for 1972-73 is difficult to forecast because of many and large changes in commodity prices'. On the one hand, prices for primary commodities remained depressed though the prices for cocoa and coffee have improved over recent months. On the other hand, as Mr Chan pointed out 'The longer term outlook is more promising with further new industries likely to come into production. Amongst them are timber products, fishing and quite possible further oil palm, cocoa and mining ventures'.

## CHAPTER 2

### PLANNING AND POLICY

#### *General*

The economy of Papua New Guinea has made considerable progress in recent years and has

been assisted by planning broadly along the lines suggested by a survey mission organised by the International Bank for Reconstruction and Development which visited Papua New Guinea in 1963 at the invitation of the Administering Authority. The Mission recommended a Five Year Development Programme covering the period 1964-65 to 1968-69. This programme placed emphasis on stimulating productive potential of Papua New Guineans and their advancement through education, vocational training and the acceptance of greater responsibility.

In May 1965, the Administering Authority endorsed the objectives of the Mission's programme, accepted the Mission's production programme as a working basis for planning and accepted many other proposals in the report for the development of manufacturing industries, tourism, mining, power supplies, transport and communications as guides for policy and action. The Administering Authority endorsed the Mission's view that expansion of education at the secondary, technical and higher levels deserved high priority. It recognised, along with the Mission, that the rate of expansion of such activities as curative health services, primary education and general government services should be related to the capacity of Papua New Guinea's population to contribute towards them. It also recognised the soundness of concentrating additional expenditures on increasing production from agriculture, livestock and forestry and on accelerating the advancement of the Papua New Guinean people through training and education.

In the years since the Bank Mission reported, substantial progress has been made along the lines recommended. However, after the report was compiled there were many new developments in Papua New Guinea and new opportunities had arisen. Crops such as oil palm and tea now had prospects not foreseen by the Bank Mission in 1964. Many more skilled Papua New Guineans were available for employment and further studies had been made of the prospects for more rapid development of the country's resources.

A five year development programme prepared at the direction of the Administrator and covering the period 1968-69 to 1972-73 was tabled in the House of Assembly in 1968 and adopted as a basis for planning. In August 1971, a further document entitled the 'Development Programme Reviewed' was tabled in the House of Assembly. The major purpose

of this document was to take into account developments which could not be adequately foreseen when the original programme was prepared. The most important of these was the development of the Bougainville Copper Project.

A new development programme covering the period 1973-74 to 1977-78 is being prepared. For this purpose a complete review of development strategy is being undertaken. Particular emphasis will be given in this programme to economic development at the district level, perhaps through the establishment of various district development corporations. Studies by the Papua New Guinea Government on how best to meet its objectives are continuing.

#### *Policy Objectives*

Economic policy in Papua New Guinea has the basic objectives of raising the level of living of the people within the framework of national unity. As a means to this end, it seeks to achieve the most appropriate combination of:

- Increases in production consistent with financial and manpower resources and market capacity.
- Contribution to meeting the social needs of the people.
- Extension of Papua New Guinean enterprise and responsibility at all levels.
- Progress towards financial self-reliance.

These objectives are embodied in the five-year development programme covering the period 1968-69 to 1972-73. The programme sets out production and other targets and envisages increased expenditure by the Administration amounting to some \$1,000m over the five-year period. The programme has been endorsed by the House of Assembly and the Administering Authority on the basis of mutual co-operation which recognises the need for Papua New Guinea to increase its financial self-reliance by raising the level of local revenue and loan receipts as much as possible.

The basic aim of the programme is to develop Papua New Guinea for self-determination and to ensure that when this stage has been reached it will, to the greatest extent feasible, be able to stand on its own feet economically. Emphasis is being put on increasing production, on advancing Papua New Guineans through secondary and higher education and vocational training and on their acceptance of greater responsibility. Major aims are to build up the capacity of the people to develop and manage their own

enterprises and also to provide greater opportunities for employment both in private industry and in administration.

Papua New Guineans will be expected to play a greater role in all sectors of the economy but at the same time considerable expansion is envisaged in forestry, mining, manufacturing and other industries which will require large private capital investment and expatriate involvement.

A review of programme progress for the financial year 1971-72 was tabled with the 1972-73 budget papers. Overall details combining economic sectors are found in Chapter 1 of this section. In addition, further progress was made during 1971-72 with localisation programmes, particularly in the Public Service. The area of opportunity for Papua New Guineans in the private sector was extended by the introduction of systems of preferential tendering, restrictions on expatriate employment and controls over licensing in retail trading and the operation of passenger motor vehicles. Increased numbers of Papua New Guineans went overseas for training in Australia and other countries under both government and private sponsorship. Considerable progress was made by both the Development Bank and the Investment Corporation in securing increased local involvement and national ownership of business enterprises.

An important aspect of economic policy is that relating to the administration of land, which is described in detail in Chapter 3 (a) of Section 4 of this Part. Provisions to protect the rights of the people of Papua New Guinea are included in all the land laws of Papua New Guinea. The basic safeguard is that only the Papua New Guinea Government may acquire land held under traditional tenure and then only if in its judgment the land is surplus to the present and prospective needs of the people, and the owners wish to sell. Having acquired the land, the Papua New Guinea Government may dispose of it to Papua New Guineans or to expatriates. As the only form of tenure given is leasehold, the Papua New Guinea Government retains some control and periodically, in accordance with the terms of the lease granted, reviews the future use of the land.

As well as protecting their existing interests in land, the Papua New Guinea Government is trying to ensure that enterprising individuals will have access to all the land they need under a system of tenure suitable to planned use.

Land settlement schemes have been started in several areas by the Government, and many indigenous agriculturalists have become leaseholders of land previously acquired by the Government. Their number is increasing rapidly. Local government councils participate in some of these schemes, e.g. in the Madang District, and the Gazelle Peninsula.

At the same time, as mentioned in Chapter 3 (a) of Section 4 of this Part, legislation has been passed which enables the conversion of customary systems of land tenure to a system which gives the individual a clear legal title to this land. This facilitates the better use of available land by Papua New Guineans and the more orderly handling of land transactions.

Capital formation is a major problem in the economic advancement of Papua New Guinea. In the traditional subsistence economy production is largely geared to current needs and the economic situation is one of stagnation rather than growth. As the people move towards a more advanced economy there is an increasing need for capital—to finance basic investigations of resources; to develop further the public utilities, including power and water; to provide roads, bridges, airfields, wharves and buildings; to purchase plant, machinery and equipment; to provide houses, schools and hospitals; to provide transport and communications.

A potential source of capital, both public and private is beginning to develop in many incomes received by the Papua New Guinean people from various forms of economic activity. To promote an extension of this kind of savings the Reserve Bank of Australia, by arrangement with the Administering Authority, has established savings and loan societies. In addition, many Papua New Guineans have subscribed to the various public loans raised each year.

In keeping with the policy of encouraging the financial self-reliance of Papua New Guinea it is expected that increasing proportions of public expenditure will in the future be financed out of local revenue and loan raisings. At the same time it must be recognised that substantial grants from the Administering Authority will continue to be necessary if the programme of development is to be achieved.

Details of the annual grant from the Administering Authority are set out in Part VI, Section 1, Chapter 1.

As the economy has become more complex a need for capital to finance the enterprise of the producer has also emerged. The need for capital has been met in a number of areas by community activity as co-operative ventures, economic projects organised by local government councils, and loan societies formed under the *Savings and Loan Societies Ordinance* 1961-1969, as well as by loans from funds administered by the Papua New Guinea Development Bank.

The various forms of credit assistance provided or backed by the Papua New Guinea Government are outlined below. Additional credit facilities are provided by the commercial banks, but use of these has been limited among the Papua New Guinean people by the fact that most of their land is held under customary tenure and cannot be pledged as security, by protective restrictions on their contractual capacity, and by their own unfamiliarity with the use of credit.

The *Investment Corporation Ordinance* 1971 established the Investment Corporation of Papua New Guinea with the objective of taking up equity, on behalf of Papua New Guineans and organisations, in major overseas investment projects in Papua New Guinea where it considered this to be in the interests of the people of Papua New Guinea, and where it considered that a significant Papua New Guinean holding would not be achieved without its intervention. The Corporation has acquired equity holdings in enterprises such as Bougainville Copper Pty Ltd, New Britain Palm Oil Ltd, Burns Philp and Co. Ltd, and Commonwealth New Guinea Timbers Ltd.

Such a policy serves not only to hasten the development of Papua New Guinea's resources and the expansion of secondary and tertiary industries, but also to provide additional avenues for training the people in managerial and technical skills. Where it has been considered useful and practicable, incentives to attract capital have been provided. These include a relatively low scale of taxation compared with taxation in Australia; tariff protection and tariff concessions; and the provision of technical and other services by the Papua New Guinea Government to investigate and provide information or advice on industrial possibilities, sites and services and on such matters as prevailing freight rates and the size and distribution of markets throughout the country.

The *Industrial Development (Incentives to Pioneer Industries) Ordinance* 1965 was

brought into operation on 1 April 1965 to encourage the establishment of industries in Papua New Guinea.

It is a responsibility of the Department of Business Development to promote active participation by local people in the field of secondary industry by the provision of counselling in all aspects of business management. The efforts of the Papua New Guinea Government to encourage primary production are also assisted by special entry arrangements to the Australian market. Specialists from various departments of the Australian Government are made available to investigate problems, to carry out scientific surveys, and to conduct such basic research as that carried out by the Commonwealth Scientific and Industrial Research Organisation in the survey of natural resources, and in recent research towards the most effective utilisation of local building materials.

A considerable amount of research and experimental work is carried on by the Papua New Guinea Government itself in relation not only to agricultural production but also to pests and diseases, stock-breeding, fisheries, forests and mining.

Subsidies either of a direct nature or by the carrying of economic operating losses, have been provided for air transport and telegraphic communications while facilities of a high standard have been established for civil aviation.

The importation of livestock for breeding has been encouraged by the granting of freight subsidies. A freight subsidy has also been granted for the importation of approved Malayan rubber planting material. Customs exemptions have been extended to the importation of agricultural machinery, some mechanical equipment, industrial metals and industrial and agricultural chemicals.

Training and advice are provided for Papua New Guineans in their own economic activities and in the new forms to which they are being introduced. These and other matters relating to the Government's policies in the economic field are described in detail in Section 4 of this Part.

The application of specifically economic measures is not, of course, the only aspect of Papua New Guinea Government policy bearing on the economic development of Papua New Guinea and its resources. In the long run such measures would have little effect if unsupported by progressive social policies



especially in the fields of labour, health and education, particulars of which are given in the relevant parts of this Report.

#### *Administrative Organisation for Economic Development*

The Office of Programming and Co-ordination was established to integrate the work undertaken by a number of separate agencies. The main function of the office is to advise on a co-ordinated development programme for Papua New Guinea taking into account financial, natural and human resources. Other departments also carry out functions relating to economic growth and development. These include the Department of Agriculture, Stock and Fisheries, the Department of Forests, the Department of Lands, Surveys and Mines, the Department of Labour, the Department of Transport, the Department of Trade and Industry and the Department of Business Development.

The Government attaches considerable importance to its agricultural extension programme (described in Chapter 3 (b) of Section 4 of this Part) and to other measures including research and development designed to assist in the establishment of new agricultural enterprises by Papua New Guineans, the development of existing enterprises and the improvement in efficiency of indigenous agriculture generally. Technical aspects of this work are primarily the concern of the Department of Agriculture, Stock and Fisheries, while other major aspects devolve upon the Division of District Administration. The aims of the Government in this direction can only be achieved fully by co-operation between officers of many departments of the Public Service—in particular the above-mentioned Departments together with the departments of Education; Public Health; Lands, Surveys and Mines; Forests; and Trade and Industry.

The planning and co-ordination of transport services and projects are the responsibility of the Department of Transport, which also carries out specific transport studies and surveys, prepares long term integrated transport development programmes and provides advisory services to private enterprise as well as government agencies.

Other instrumentalities with responsibilities in the field of economic development include the Land Development Board, details of which are given in Chapter 3 (a) of Section 4

of this Part, the Papua New Guinea Copra Industry Stabilisation Board and the Coffee Marketing Board.

As mentioned in Chapter 3 Part V, local government councils prepare finance and administer local economic development programmes, while co-operative societies also play an important part in the economic progress of the Papua New Guinean people. Details of co-operative and rural progress activities are given in Chapter 1 of Section 4 of this Part. The Department of Business Development, District Administration, and Agriculture Stock and Fisheries actively foster these forms of organisation and advise and assist the people with their economic plans.

#### *Non-Government Organisations*

The main non-government organisations of an economic nature in New Guinea are the Chambers of Commerce at Rabaul, Port Moresby, Madang and Lae; co-operative societies; the Highland Farmer's and Settlers' Association; the New Guinea Graziers' Association; the Morobe District Planters' and Farmers' Association; the Planters' Association of New Guinea; and the Madang, Lae and Rabaul, Port Moresby, Cape Rodney, Samarai and Popondetta Workers' Associations.

### CHAPTER 3 INVESTMENTS

As mentioned in Chapter 2 of this Part and Section the investment of outside capital in Papua New Guinea is encouraged subject to suitable safeguards to protect the interests of the Papua New Guinean population.

The procedures governing the formation and registration of domestic and foreign companies are described in Chapter 1 of Section 4 of this Part.

During 1971-1972, 365 companies were incorporated as local companies. At 30 June 1972, 2,718 local companies were registered. In the same period, 84 foreign companies (i.e. companies incorporated outside Papua New Guinea and carrying on business in Papua New Guinea) were registered and 3 were de-registered making the number of foreign companies operating in Papua New Guinea at 30 June 1972: 651. Many of these companies operate through agents, usually a local company or firm. Particulars of local and foreign companies operating in Papua New Guinea

are given in Appendix VII Table 6. Statistics of personal and company taxation for Papua New Guinea are included in Appendix V.

The Administering Authority has subscribed capital to New Guinea Resources Prospecting Co. Ltd. The total paid-up capital of this company is \$600,000 and of this the Administering Authority and its nominees have subscribed \$305,998. The Investment Corporation of Papua New Guinea bought during 1971-72 all of the shares previously owned by the Commonwealth and its nominees in a local company, Commonwealth-New Guinea Timbers Ltd. The total paid-up capital of Commonwealth-New Guinea Timbers Ltd is \$3,000,000 and of this the Investment Corporation of Papua New Guinea owns 525,000 \$2 shares.

The Government of Papua New Guinea has subscribed \$1,249,970 equity capital plus 10 shares of \$1 each which are held by 3 Government nominated directors i.e. a total of \$1.25m, being 50 per cent of the paid-up capital of New Britain Palm Oil Development Ltd a local company. In addition, the Papua New Guinea Development Bank has granted New Britain Palm Oil Development Ltd a convertible loan of \$1.25m for expansion of the company's oil palm estate and factory. Both these amounts have been matched by Harrison's and Crossfield (ANZ) Ltd. The Government has, by exercising an option over 20 per cent of the equity capital of Bougainville Copper Pty Ltd (a subsidiary of Conzinc Riotinto of Australia Ltd), invested \$25m in that project.

The *Business Names Ordinance* 1963-1967 requires every person or group of persons carrying on business in Papua New Guinea under a name other than the true names of all the members of the business to register the business name in accordance with the Ordinance. There were 1,907 business names registered under this Ordinance at 30 June 1972.

#### CHAPTER 4 ECONOMIC EQUALITY

Persons of all nations are accorded equal treatment in economic matters by the Government of Papua New Guinea.

#### CHAPTER 5 PRIVATE INDEBTEDNESS

There is no significant problem of private indebtedness among members of any section of the population. Among the indigenous

population there is a certain amount of indebtedness in kind and in services towards kinsfolk, but this is within the framework of the social structure and forms an essential part of custom in relation, for example, to such matters as marriage. Usury is not permitted in Papua New Guinea.

### Section 4. Economic Resources, Activities and Services

#### CHAPTER 1 GENERAL

##### *Policy and Legislation*

The general situation regarding economic resources, activities and services and the policy for economic development are described in Chapters 1 and 2 of Section 3 of this Part.

Executive responsibility for implementing government policy rests with the Departments of Trade and Industry, Agriculture, Stock and Fisheries, Forests and Lands, Surveys and Mines, which work in close co-operation with the Division of District Administration.

Legislation relating to the protection of Papua New Guinea's resources includes the Lands, Mining, Water Resources, Forestry, Fisheries, Fire Prevention and Quarantine Ordinances, and developmental and marketing enactments such as the *Papua New Guinea Development Bank Ordinance* 1965-1969, *Co-operative Societies Ordinance* 1965-1969, the *Papua New Guinea Copra Marketing Board Ordinance* 1952-1967, the *Petroleum (Prospecting and Mining) Ordinance* 1951-1967, the *Cacao Ordinance* 1951-1952, the *Cocoa Industry Ordinance* 1958-1966, the *Coffee Industry Ordinance* 1960-1967 and the *Papua and New Guinea Coffee Marketing Board Ordinance* 1963-1970.

In addition to providing for the control of pests and diseases, some ordinances and regulations prescribe for the inspection and grading of products according to recognised standards.

In general local laws and customs do not conflict with the provisions made to conserve resources. Care is taken to ensure that expatriate development is not injurious to Papua New Guinean interests.

No special privileges are granted to any expatriate groups in any branch of the economy.

Normal banking and commercial credit facilities, which are described in another section of the Report, are available to all sections of the community.

#### *Production, Distribution and Marketing*

Cash crops are mainly sold overseas, and to assist economic advancement in Papua New Guinea, Australia generally provides favourable marketing conditions for the former's products. Agricultural products may be sold freely in Papua New Guinea according to the owner's judgment. Generally there is competition between traders operating there for the handling of products for marketing overseas. Exports of copra are controlled and there is some control on the export destinations of coffee.

Many Papua New Guineans successfully engage in business activities on their own account. Information on the participation of co-operative societies and local government councils in production and commercial activities is given later in this chapter and in Chapter 3 of Part V.

Numbers of Papua New Guineans are engaged in mining for alluvial gold in the Morobe, Eastern Highlands, Western Highlands and East and West Sepik Districts. Some work full-time at the occupation but most work the alluvial deposits as an adjunct to traditional subsistence farming operations. Where banking facilities are not available the Government receives gold parcels and makes payment to the miners. Papua New Guinean mining operations are encouraged by the Government through technical advice and help.

The main exports of Papua New Guinea are, at present, coconut products, coffee, cocoa, forest products, rubber, fish products, gold, crocodile skins, peanuts, pyrethrum extract, tea and passionfruit juice.

Papua New Guinea is accorded preferential tariff treatment by Australia and all produce is exempt from primage duty there. Papua New Guinea produce, other than manufactures, normally pays the lowest rates of duty applicable under the Australian tariff, and many commodities are either completely exempt or subject to special rates; such concessions are almost exclusively for Papua New Guinea produce.

Items admitted from Papua New Guinea into Australia duty free include copra, cocoa

beans, raw coffee, rubber, shells, pepper, passionfruit juice (subject to quota), peanuts and most forest products.

Papua New Guinea is also a beneficiary of the generalised Preference System of many developed countries, and of the Australian System of Preferences accorded to the export of manufactures from developing countries.

During 1961 an arrangement was negotiated allowing preferential treatment for Papua New Guinea's coffee imports into Australia. Since October 1966 the arrangement has included the remission of duty on raw coffee imported into Australia from sources other than Papua New Guinea for each importer who during a specified period obtains 30 per cent or more of his requirements of raw coffee from Papua New Guinea. All raw coffee imported into Australia from Papua New Guinea continues to be admitted duty free.

Following a request by coffee growers for a coffee marketing board and having regard to the requirements of the International Coffee Agreement and the incentive arrangements for marketing Papua New Guinea coffee in Australia, the *Papua and New Guinea Coffee Marketing Board Ordinance 1963-1970* was brought into effect in 1964. The Ordinance provides for the establishment of a Coffee Marketing Board with power to regulate the marketing of Papua New Guinea coffee. The Board consists of six members appointed by the Minister of State for External Territories, five of whom are selected from panels of names submitted by organisations representative of the coffee growers of Papua New Guinea and the sixth is required to be an officer of the Public Service. The present Board consists of 2 Papua New Guinean members, 3 expatriate members and the Director of Agriculture, Stock and Fisheries.

The marketing of rubber from Papua New Guinea in Australia is facilitated by the remission of duty on non-Papua New Guinean rubber when the satisfactory sale of Papua New Guinea rubber offering on the Australian market is assured.

The marketing of copra is under the control of the Copra Marketing Board, a body corporate set up under the *Papua and New Guinea Copra Marketing Board Ordinance 1952-1967*. The Board, appointed by the Minister of State for External Territories, consists of a chairman, 3 representatives of the copra producers of Papua New Guinea, one other member and the Director of Agri-

culture, Stock and Fisheries. There is one Papua New Guinean member on the present Board.

Under powers conferred by the ordinance the Board purchases and sells copra on behalf of the producers. It is the sole exporter of copra and is empowered to determine the price for any copra which it purchases. Copra is sold on the open market.

Copra is purchased by the Board under a system of grade and ownership markings, which is designed to eliminate confusion regarding ownership brands and applies to all producers and traders. A considerable percentage of copra produced by Papua New Guinean planters is channelled to the board through co-operative societies, but where an indigenous producer desires he may operate his own account with the Board.

The Board takes delivery of copra from ships' slings where water transport is used or at a warehouse of the Board where road transport is used.

The price of copra paid to producers is arrived at on a modified 'pool' principle. A tentative f.o.b. price is determined from the overseas and local sale contracts made by the Board and deductions are made to cover the estimated costs of handling, administration, 'instore' shrinkage, etc. The final prices are determined in the light of actual trading results, the entire net proceeds being distributed *pro rata* among the producers who delivered copra.

A Papua New Guinean producer can receive an immediate cash payment on delivery of copra to the Board, but the accounts of all other producers are settled twice monthly.

#### *Stabilisation*

The copra industry is supported by a fund which totalled \$9,385,000 at 30 June 1971 and is earning interest at the rate of about \$550,000 per annum. The Copra Fund, which is established under the *Customs (Copra Industry Stabilisation) Ordinance 1959-1960*, was commenced from a levy on copra production introduced in 1946. The levy was discontinued in 1959. A Board of 5 members, 3 representatives of the copra producers of Papua New Guinea and 2 other members, administers the fund. The fund is now sufficient to cushion any severe fall in prices and the Board, taking into account the overall position, declared a bounty for producers for the 1970-71 financial year. A bounty of \$3

per ton was paid to producers, involving total payments of approximately \$410,000 during 1970-71. The amount of bounty paid increased greatly in 1971-72.

#### *Monopolies*

The postal and telegraph service has been established as a monopoly reserved to the Government, the telecommunications services being operated in conjunction with the Overseas Telecommunications Commission of Australia.

#### *Private Corporations and Organisations*

Procedures for the formation and registration of companies are prescribed in the *Companies Ordinance 1963-1968* of Papua New Guinea and the regulations made thereunder.

A company may be incorporated in Papua New Guinea upon production to the Registrar of Companies of the memorandum and articles of association. These must set out the name, objects and rules of the company and be signed by at least five persons, or in the case of a proprietary company, two persons who agree to become members of the company. A list of persons who have consented to be directors of the company must also be produced. Upon registration of the memorandum and articles the Registrar issues a certificate of incorporation and the members of the company are then a body corporate under the registered name of the company with perpetual succession and a common seal. A registration fee is payable at prescribed rates.

Any company incorporated outside Papua New Guinea and carrying on business in Papua New Guinea is required to register as a foreign company. Registration is effected upon production of the following documents and particulars to the Registrar of Companies:

- (i) a certified copy of the certificate of incorporation of the company;
- (ii) a certified copy of the memorandum and articles of association or similar document defining the constitution of the company;
- (iii) a list of the directors of the company;
- (iv) a memorandum of the powers of any local board of directors;
- (v) a memorandum of appointment of an agent resident within Papua New Guinea;
- (vi) notice of the situation of the registered office of the company within Papua New Guinea; and

(vii) a statutory declaration by the agent verifying certain details concerning the company.

Upon registration the Registrar issues a certificate of registration embodying particulars of the company's name, incorporation, registration, registered agent and registered office in Papua New Guinea. A registration fee is payable at prescribed rates.

## CHAPTER 2 COMMERCE AND TRADE

### *Ministerial Responsibility*

During the year under review the Papua New Guinea Government's Ministry for Trade and Industry exercised full authority and final responsibility for customs and excise administration, including duty collection; entry or deportation (except cases involving security considerations) under the Migration Ordinance within the framework of approved government policy; alien registration; censorship; tourism; dangerous drugs control; industrial estates; and through a Board of Enquiry incentives for pioneer industries.

The Administering Authority retained responsibility for policy aspects of international trade, and commodity policy including tariffs; international marketing and trade promotion; and security aspects of migration.

In the Second House of Assembly, the Ministerial Member for Trade and Industry was Mr Simon Bilas, MHA. His successor in the Third House of Assembly is Mr John Poe, MHA.

### *General*

The commercial life of Papua New Guinea is based mainly on the production and sale of primary products and the importation of manufactured goods, including foodstuffs. However, secondary industries are being established and developed.

The indigenous people are almost wholly self-sufficient in food and domestic requirements, but, as a result of the Administering Authority's efforts to improve standards of nutrition, health and village hygiene and the general standard of living, new demands are constantly arising. These are met by various means including indigenous co-operatives where cash crops and trading have been introduced.

Provision for the education of officers and employees of the co-operative societies is

made at the Co-operative Educational Centre, Port Moresby. Particulars of co-operative activities are given later in this Chapter and in Appendix XIV.

Markets exist throughout the country. The indigenous inhabitants are able to participate in trade to a greater degree as the range of products extends and transport facilities are improved. The Papua New Guinea Development Bank provides development finance when it would not otherwise be available on reasonable terms and conditions. The Bank primarily assesses the prospects of the borrowers' operations being successful rather than to the amount of security the borrower can offer for a loan.

Papua New Guinean co-operatives and individuals are taking an increasing part in processing and marketing of primary produce, wholesaling and retailing of goods, and other activities such as transport.

Apart from investment in co-operative societies, Papua New Guineans are taking part in the money economy through such enterprises as the Tolai Cocoa Scheme, Namasu Limited, Wasu Limited and Palnamadaka Co. Limited.

An executive cadets training scheme operated by a major company, offers young Papua New Guineans employment as executive cadets in training. These youths are sponsored by the company as full-time students on advanced courses and trained as future executives.

Goods are distributed through wholesale and retail traders at the main ports and centres and through small stores and by mail in the more scattered settlements. There is also some direct trade between private individuals and business houses in Australia and New Zealand.

There is no restriction on the distribution of foodstuffs, piece goods or essential commodities.

Provision exists under the *Prices Regulation Ordinance* 1949 for the regulation of prices. Maximum prices have been declared only for certain foodstuffs and petroleum products, tobacco and cigarettes, sawn timber and taxi fares. As there is no shortage of essential commodities and their distribution is adequately catered for by normal commercial channels, no special measures for their allocation are needed.



(DET photo)

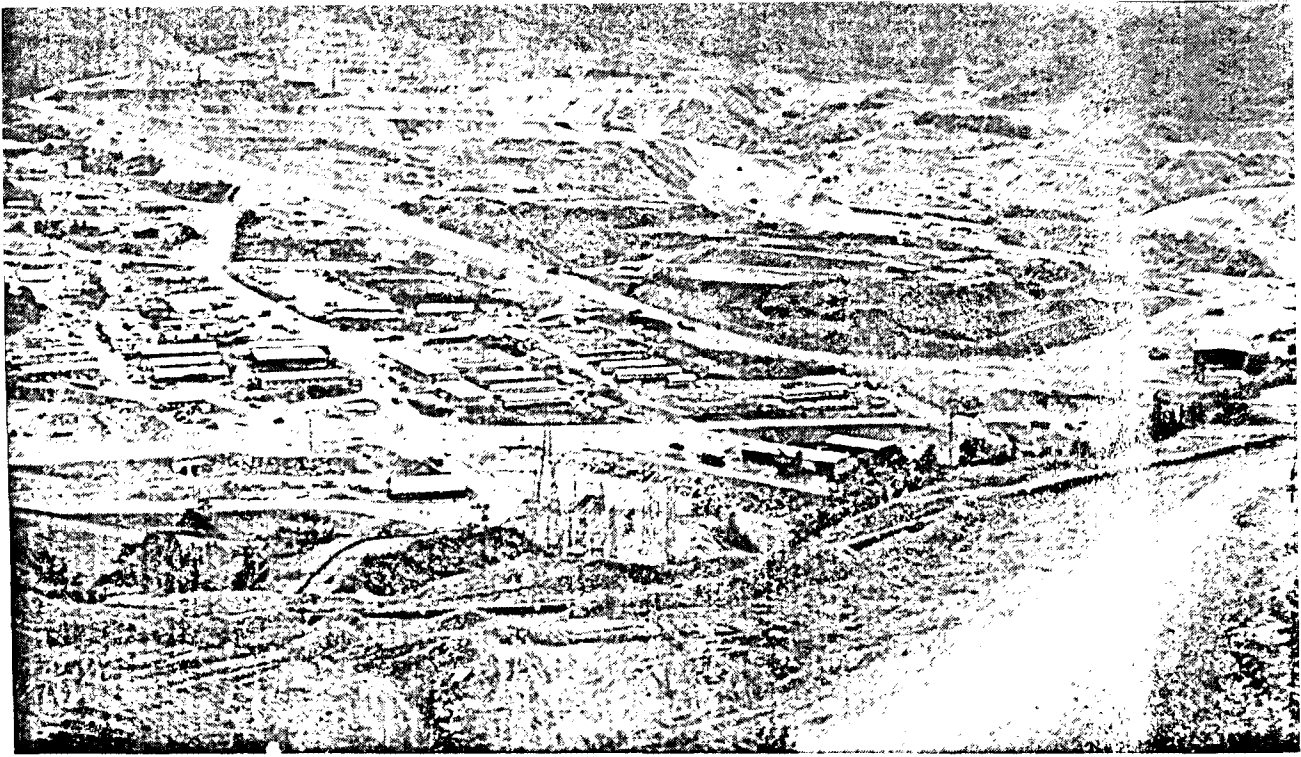
*(Above) The then Prime Minister of New Zealand, Sir Keith Holyoake, discusses tea and coffee growing areas in Papua New Guinea with a tourist officer of the Tourist Board, Miss Theresa Lawrence, during the August/September 1971 New Zealand International Trade Fair in Wellington.*

*(Below) An officer of the Papua New Guinea Forestry Department, Mr Johnson Timothy, discusses with a Japanese businessman the qualities of Papua New Guinea timber at the Sydney International Trade Fair in August 1971.*

(DET photo)





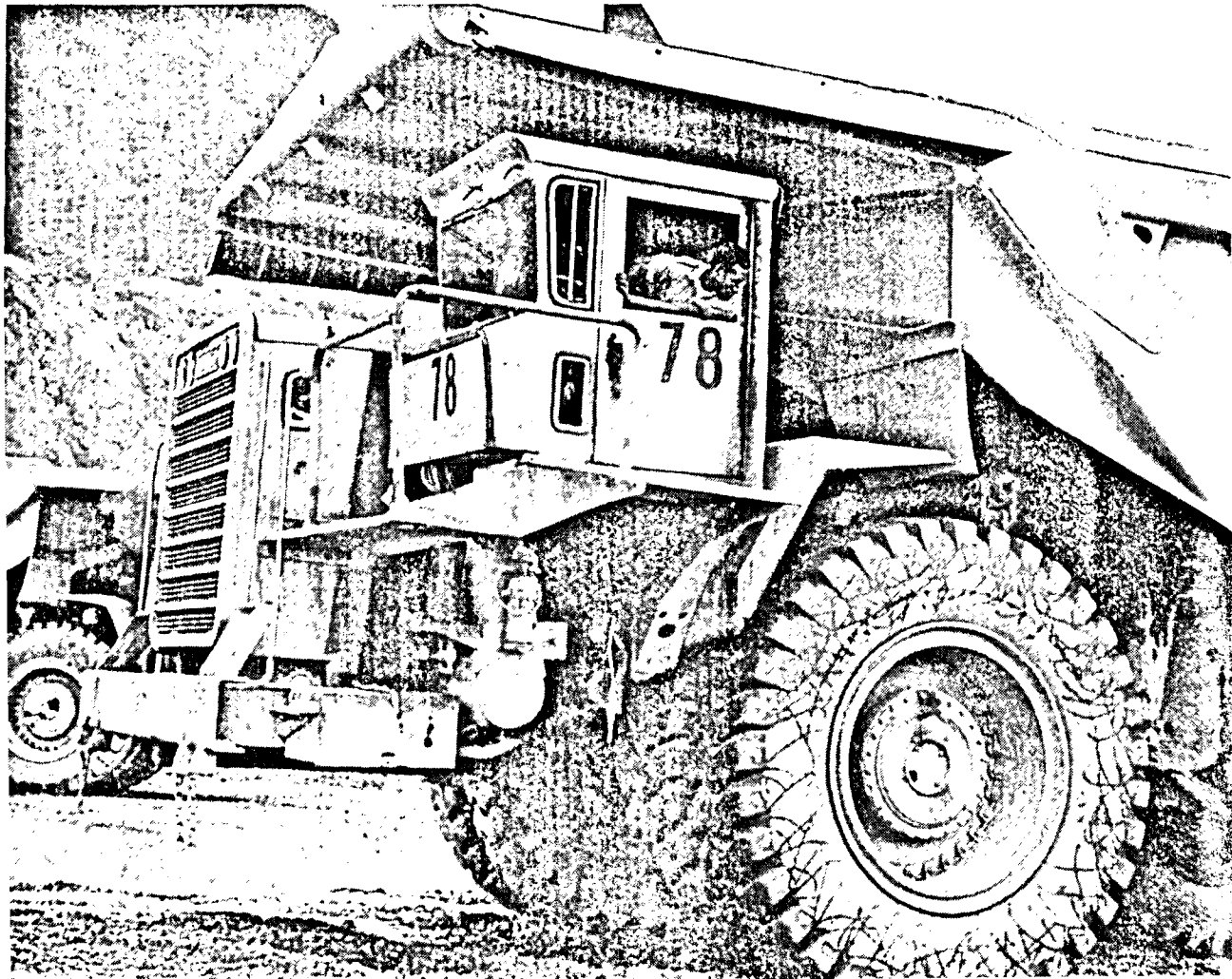


(DIES 1)

*(Above) A view of portion of the area of the Bougainville mining project. Production started to show results during the year and many jobs were provided for Papua New Guineans.*

*(Below) One of the huge trucks which operate on the various sites of the project.*

(DIES 2)



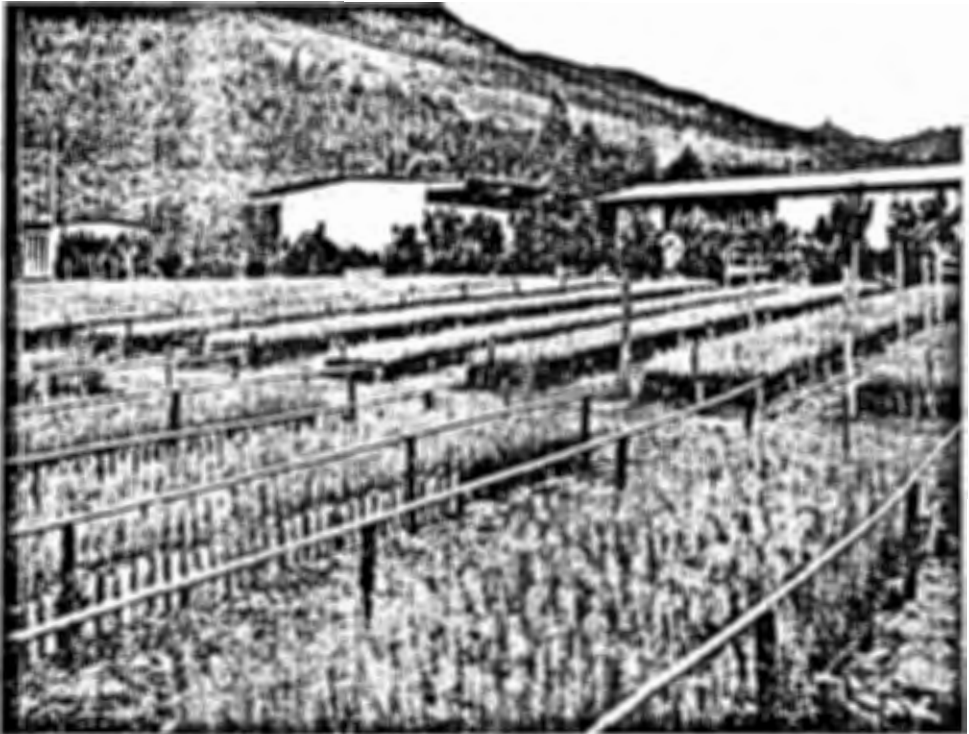


(Dept of Forests photo)

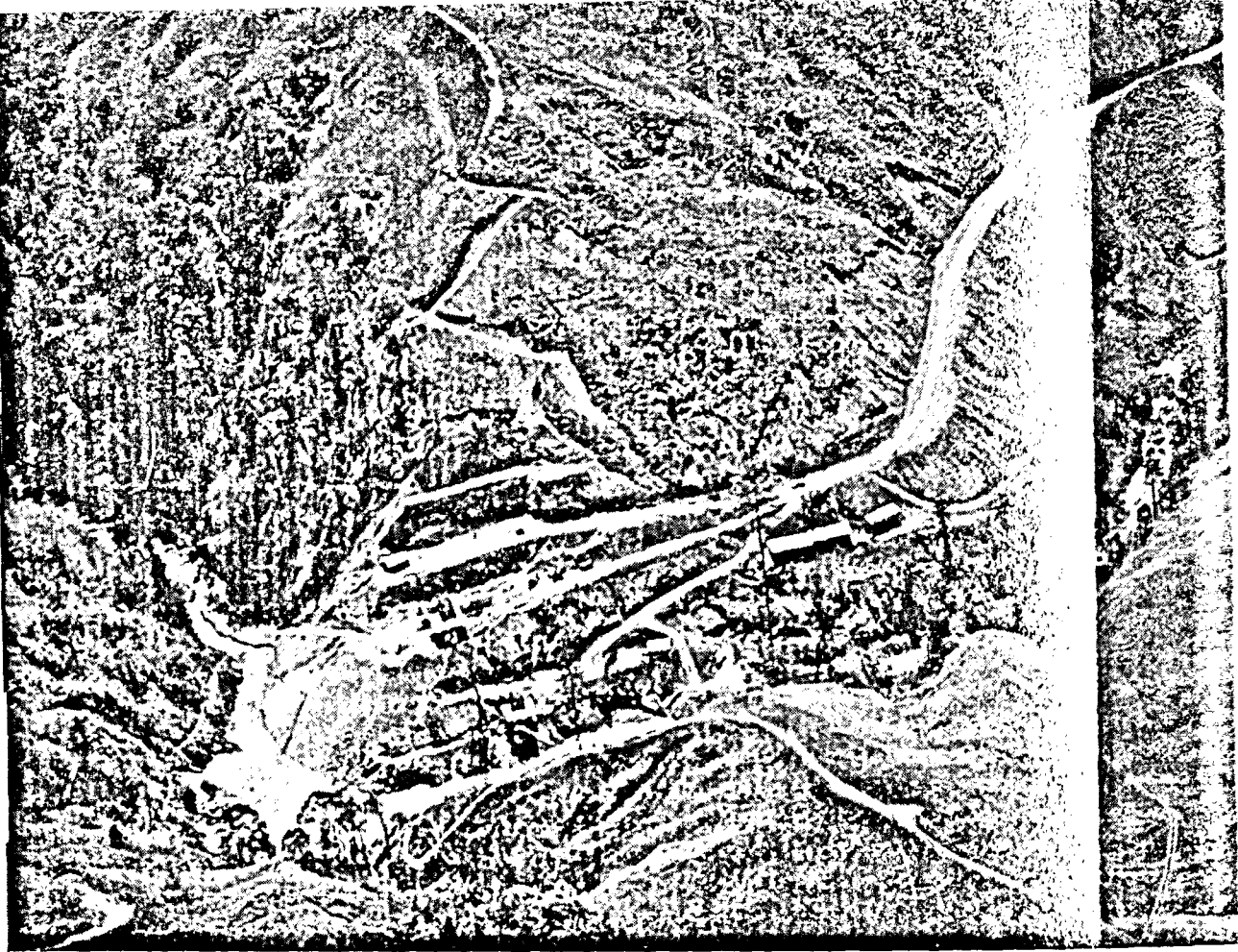
*(Above) The Minister for Forests Mr Moses Sasakila (left) inspecting Araucaria plantations in the Bulolo-Wau Valley.*

*(Below) Department of Forests nursery at Lapegu in the Eastern Highlands District.*

(Dept of Forests photo)







(DET photo)

*(Above) A portion of the Ramu Hydro-electric Scheme from the air. This multi-million dollar scheme will develop the water resources of the upper Ramu River and harness power for use by many towns and cities in Papua New Guinea.*

*(Below) The Minister for Health, Dr Reuben Taureka, talking with staff of the Kundiawa Hospital in the Chimbu District.*

(Dept of Health photo)



### *External Trade*

The development of export crops is encouraged where there are considered to be market prospects, and endeavours are made to ensure adequate access to world markets for Papua New Guinea produce.

Private enterprise continues to seek out better and new opportunities to sell most locally produced commodities to best advantage on external markets. Action by the Administering Authority has included negotiating favourable conditions of access to Australian and overseas markets, keeping the special circumstances of Papua New Guinea under notice in international trade forums and actively promoting locally produced products at international trade fairs and displays. These activities are carried out in co-operation with growers and traders. Where international commodity agreements exist or are proposed, as for coffee, cocoa, tea, oil-seeds, oils and fats, efforts to protect the needs and interests of Papua New Guinea are continuing.

The International Coffee Agreement, which began to operate in October 1963, has been extended to Papua New Guinea. The main objects of the Agreement are to achieve a reasonable balance between supply and demand in the international coffee market, to keep prices at equitable levels, to increase consumption and thereby to strengthen the general economies of coffee-producing countries. This Agreement was re-negotiated for another five-year term from October 1968. The Papua New Guinea Government has co-operated fully in implementation in Papua New Guinea of the control system of the Agreement including certificates of origin and coffee exports stamps.

Apart from freight subsidies to encourage the importation of good quality cattle and thoroughbred station horses, there are no direct or indirect subsidies designed to stimulate imports or exports of any particular category.

The Papua New Guinea Government publishes an overseas trade bulletin each quarter and annually which shows the details of exports and imports by quantity, value and country, classified in accordance with the Standard International Trade Classification. Imports and exports to and from Papua New Guinea are recorded separately.

In the 5 years 1966-67 to 1970-71 the value of exports almost doubled from \$53.2m

to just under \$102m. During the same period the value of imports more than doubled, from \$125.9m to \$254.6m. This rapid growth in trade is indicative of Papua New Guinea's rapid rate of economic development. Capital expenditure on the development of the Bougainville Copper Project greatly increased the value of imports during 1969-70 and 1970-71. However, as a result of this capital expenditure the value of exports will increase dramatically as the copper mine comes into full production. Mining exports for 1971-72 were valued at approximately \$24m.

There has been significant diversification of Papua New Guinea's exports, with increasing quantities of new commodities such as teas, desiccated coconut and coconut shell charcoal being exported. The value of tuna and prawns is increasing rapidly with the development of several large ventures by international companies in Papua New Guinea waters. A factory to process palm oil was opened last year, and this will further enhance the value of exports.

The Administering Authority co-operates closely with the Papua New Guinea Government in assisting exporters by carrying out market research into opportunities for Papua New Guinea's export commodities. Trade displays and exhibits are organised in overseas countries in order to explore new outlets and consolidate established markets. These displays are organised in close co-operation with private exporters who provide product samples, and, where appropriate, assist in staffing the exhibits. During 1971-72, trade displays, successfully promoting Papua New Guinea products, have been held at the Pacific Fine Foods Fair at Los Angeles, the Sydney International Trade Fair and the Wellington International Trade Fair. Early in November 1971 a reception was held for the cocoa trade in London featuring a new film on cocoa production and processing in Papua New Guinea, as well as selected cocoa samples and chocolate products made from Papua New Guinea cocoa. During the same month a general display of Papua New Guinea art and commodities was held in Hamburg, Germany, while in February to April 1972 a series of trade exhibits, especially featuring timber, was conducted in Japan—in Tokyo, Hiroshima, Shizuoka and Toyama—to support Japanese importers of New Guinea timber, and to give wide publicity to the availability and quality of our products.

The following figures show the trend in the value of trade over recent years:

| Year       | Imports | Exports    |        |
|------------|---------|------------|--------|
|            |         | Total      | Net(a) |
|            | \$'000  | \$'000     | \$'000 |
| 1966-67..  | 125,875 | 53,220     | 45,679 |
| 1967-68..  | 143,447 | 70,250     | 59,057 |
| 1968-69..  | 147,728 | 75,327     | 64,890 |
| 1969-70..  | 213,051 | (c) 93,560 | 71,443 |
| 1970-71(b) | 254,599 | 101,932    | 77,447 |

(a) Total exports less re-exports. (b) Preliminary: from 'Overseas Trade Statistics', Bureau of Statistics -- Konedobu, Papua. (c) Includes the re-export of an oil rig valued at \$8,000,000.

As a significant portion of Papua New Guinea's exports go to Britain, special safeguards for the trade interests of Papua New Guinea were incorporated into the Treaty of Accession for British entry to the European Common Market.

These safeguards were obtained after representations by a high level delegation, led by the Minister for Trade and Industry, which visited London and European capitals during October and November 1970, to reinforce representations on behalf of Papua New Guinea by the Administering Authority.

The representations culminated in an arrangement whereby the British Government has accepted an offer from the six Common Market countries under which exports originating in Papua New Guinea will be able to enter the United Kingdom until 1 January 1978, under the conditions which apply at the time of British accession to the European Economic Community. The offer also provides that these arrangements may be reviewed, in particular, if Papua New Guinea becomes independent before that date.

Papua New Guinea trade interests were also represented at several important internal trade conferences, including—

- The United Nations Cocoa Conference, convened at Geneva in March 1972;
- the Committee on trade, of the United Nations Economic Commission for Asia and the Far East, and;
- the third Session of UNCTAD at Santiago, Chile.

#### Customs Duties

No customs union exists with the metropolitan country and no preferences on imported

goods are given in the Customs Tariff of Papua New Guinea.

Customs duties are imposed on imports in accordance with the *Customs Ordinance, 1951-59* and *Customs Tariff 1959-1971*.

A Tariff Advisory Committee enquires and reports to the Minister for Trade and Industry on matters relating to tariff assistance and protection to industries established, as are referred to it.

#### Import Restrictions

All import licensing in Papua New Guinea was abolished as from 1 September 1959. On the other hand, temporary import restrictions and licensing was imposed in relation to the importation of matches as from 1 February 1972 as a temporary measure of protection to a prospective match industry.

Importation of rice grown in places other than Australia is almost entirely prohibited, under rice supply arrangements between the Papua New Guinea Government and the rice industry in New South Wales, Australia.

#### Export Licences

The *Exports (Control of Proceeds) Ordinance 1952-1968* prohibits the exportation of any goods to places other than the Commonwealth of Australia or its Territories unless a licence is in force and its terms and conditions (if any) are complied with. The ordinance is designed to ensure the receipt into the banking system of all proceeds of overseas transactions, and the proper valuation of exports.

Administrative machinery was set up within the Department of Trade and Industry in February 1972 to provide supervisory framework in relation to declared export values. No fees are imposed for the issue of licences.

#### Business Development

*Ministerial Responsibility.* During the year under review the Papua New Guinea Ministry exercised full responsibility and final authority in relation to all the functions of the Department of Business Development, including the business development, including the promotion of maximum participation in business by Papua New Guineans and business advisory services, the Co-operative Registry, the co-operative extension services, and co-operative education. In the Second House of Assembly the Assistant Ministerial Member responsible for Co-operatives was Mr Lepani Watson. In the Third House of Assembly the Minister for Business Development is Mr Donatus Mola, MHA.

*Department of Business Development.* The Department of Business Development has the primary function of increasing the degree of involvement of indigenous people in the business sector of the economy. The functions of the new Department are:

- (1) survey continuously the entire business market, identify business openings, and devise and implement means for ensuring increasing participation in business by Papua New Guineans;
- (2) provide direct assistance in market survey, accounting, taxation and technical advisory services for Papua New Guinean businesses;
- (3) identify fields wherein co-operatives could viably operate, and provide direct assistance in the establishment and operation of co-operatives, control the Registry of Co-operatives;
- (4) provide or encourage the provision of training in the co-operatives and small business fields, identify employment opportunities for qualified persons; and
- (5) maintain appropriate liaison with financing institutions and with other departments.

The present structure of the Department consists of two field divisions, the Division of Co-operatives Development and the Division of Business Extension, a Training Branch and an Administrative Branch.

*Division of Co-operatives Development.* The Division of Co-operatives Development is headed by a Chief of Division and has two main functions—field work and financial advising. The field section of the division is responsible for assisting co-operative societies to run properly and to examine proposals for new societies. Officers of this section regularly visit co-operative societies throughout Papua New Guinea. They examine bookkeeping records, give advice on management and assist the Members, office bearers and staff to understand the running of their societies. They also assist the societies to meet the requirements laid down in the Co-operative Societies Ordinance.

Members of the Financial Advisory Section are qualified accountants and are available to help the field officers with bookkeeping and accounting procedures for the individual societies. They also directly assist the larger societies to prepare annual reports and income tax returns.

The co-operative movement in Papua New Guinea is governed by the *Co-operative Societies Ordinance 1965-1971*. Powers to administer the Co-operative Societies Ordinance are vested in the Registrar of Co-operative Societies who is also the Chief of Division of Co-operatives Development. This Division is organised into nine Districts throughout Papua New Guinea, each under the charge of a District Co-operatives Development Officer. These District Co-operatives Development Officers are responsible to the Chief Co-operatives Development Officer who is in turn responsible to the Chief of Division.

At 13 June 1972, there were fourteen Associations of Co-operative Societies, two Co-operatives Unions operating in Papua New Guinea. In areas where the Co-operative Wholesale Society Ltd is the importing and wholesaling organisation, the Co-operative Association provides advice and secretarial services for the member societies. The Co-operative Wholesale Society Ltd which in the previous year was hampered by a management problem and lack of finance made a substantial recovery during the year.

The value of agricultural produce sold by co-operatives has increased from \$4.3m in the year ended 1970 to \$5.1m in the year ended 1971. This increase was almost entirely due to an increase of \$0.8m worth of coffee. Total sales of coffee by co-operatives for the year ended 1971 were more than \$2.8m.

For the year ended 31 March 1971 total turnover by primary societies was \$6.97m which produced a total net surplus of \$376,000, representing a net surplus of about 5.5 per cent. During the year primary societies distributed \$330,000 by way of dividends, rebates and bonus shares. Subscribed share capital was \$3.2m plus reserves of \$1.1m.

In some areas staffed by officers of the Division individual co-operatives also received advice from Honorary Advisers appointed by the Registrar of Co-operative Societies. These honorary advisers are usually field officers of the Department of Agriculture, Stock and Fisheries.

During the year a number of the intended extension activities of the Department have had to be curtailed or abandoned because of lack of suitable staff and finance. Because of the Department's limited resources a great deal of its activities has been directed towards holding operations and in the consolidation of its past activities.

The Financial Advisory Section of the Division of Co-operatives Development provides without charge an accounting and auditing service for societies with turnovers less than \$200,000. Societies with turnovers in excess of this amount are required by law to appoint an auditor from outside the Division. Trainee officers of the division received their training at the Co-operative College, a joint project of the United Nations Development Programme, the Papua New Guinea Government and the Co-operative Movement which in May 1971 replaced the Co-operative Educational Centre.

*Training Branch.* The Branch produces teaching material related to the various subjects taught at the Co-operative College. Such material supported by audio-visual aids is geared to suit the level of teaching depending on the grade of the course concerned, both for the College as well as in the field. The training staff are either trained teachers specialising in commercial subjects or specialists with considerable experience in those subjects that concern particular areas of activity in the operations of the Department of Business Development.

With the completion of the first stage of the Co-operative College at Laloki (about 14 miles from Port Moresby), a series of courses were held at both centres, that is, at the College and the old Co-operative Education Centre in Port Moresby. The 2 year course for local officers was redesigned and termed as follows:

- Board of Commercial Studies Certificate Course—Stage I (9 months)
- Board of Commercial Studies Certificate Course—Stage II (9 months)
- Board of Commercial Studies Certificate Course—Stage III (6 months)

all 3 stages covering 12 subjects stipulated by the Board of Commercial Studies to qualify for the Certificate, and 4 subjects relating to agricultural marketing, retail management, extension techniques and co-operation.

The second stage in construction of the Co-operative College training and dormitory facilities was completed in March 1972. It is expected that the Library will be completed by August 1972. This resulted in the closing down of the old Co-operative Education Centre and the concentration of all training courses at the College.

The Training Branch staff consisted of 19 members excluding administrative lower positions, and, the team of UNDP/ILO experts increased from 3 to 6 by the end of the year under review. UNDP provided substantial assistance in the form of teaching and printing equipment, books, and, transport in the shape of a 25 seater bus and a land cruiser.

*Career prospects in the Department of Business Development.* New recruits as trainees undergo:

- Stage I at the Co-operative College—9 months.
- Stage II at the Co-operative College—9 months.
- Field training—3 months.

Appointed Grade I officers in the field for 12 months return to the Co-operative College after 12 months for Stage III—6 months—satisfactory completion of which qualifies them for the Board of Commercial Studies Certificate and further advancement in the department.

Technical Assistants receive specialised training in the Business Promotion Centre in Port Moresby and in the Small Industry Centres.

With the approach of Papua New Guinea to self-government and later independence, the Papua New Guinea Government has accelerated training in its localisation programme.

*Division of Business Extension.* This Division comprises 3 sections—Business Extension Service, Financial Advisory Service and Small Industry Section. Redesignation and reclassification of the first 2 sections were approved in May 1972, after an analysis of current and expected developments of indigenous entrepreneurship. Even though any improvement resulting from the reorganisation cannot yet be observed, the following recommended functions include additional activities of both sections:

- Develop participation by Papua New Guineans in commerce and industry with emphasis on diversification of production and new industries.
- Advise and assist Papua New Guineans in establishing and operating business enterprises by—
  - conducting economic and marketing surveys and feasibility studies of potential for business activities.

- providing business, financial advisory and management consultation services including on-the-job training and assistance,
  - organising and, if necessary, providing business premises and other facilities for Papua New Guineans on a short term basis,
  - promoting the establishment of business ventures between Papua New Guineans and people of other races.
- Collect, collate and analyse statistical information on business activities involving Papua New Guineans.

Reorganisation of the Small Industry Section into the Technical Advisory Service, at present under consideration, should give the division the basic strength to tackle technical problems.

As at 30 June 1972 the divisional staff totalled 77 officers, namely 28 overseas officers, 2 CUSO volunteers, 27 local officers and 20 local trainee business extension officers attending the 2-year course at the Co-operative College at Laloki.

Field staff operate in 14 districts, from Business Promotion and Small Industry Research & Development Centres or Business Extension Offices. During 1971-72 two additional offices were opened at Kerema and Kimbe, and construction of two Business Promotion and Industry Centres completed at Lae and Arawa. The intention to operate offices at remaining four districts has been constrained by the lack of experienced and qualified staff.

Dealings with clients, as shown in the following table, have been increased not only in numbers but particularly in variety of enquiries for assistance:

|               | 1967-68 | 1968-69 | 1969-70 | 1970-71 | 1971-72 |
|---------------|---------|---------|---------|---------|---------|
| Clients ..    | 2,033   | 1,750   | 1,800   | 3,949   | 3,590   |
| Interviews .. | 3,106   | 2,594   | 6,483   | 16,213  | 18,624  |
| Offices ..    | 6       | 7       | 10      | 12      | 14      |

A steady and continuous shift of indigenous businessmen into more technical and complicated ventures has been observed. It is the most important change in the development of indigenous entrepreneurship. Papua New Guinean contractors assisted by expatriate field officers won 391 contracts at a total value of \$842,000 during the last financial year. To

support and encourage further extension of those businesses, the department has recommended a policy of preference to Papua New Guinean contractors for selected tenders up to a value of \$125,000. Implementation of this policy should at least double the amount shown above. The department has helped with the establishment and registration of a number of indigenous companies. The formation of an indigenous-controlled manufacturing company, Highland Weavers, which produces and markets woollen rugs, ponchos etc., has pushed ahead the indigenous hand textiles industry. Similarly, promotion of taxis, and mini-buses operated by indigenes at Port Moresby, Madang and Mount Hagen has been successful and will follow at other major centres.

The Trade Store Licences Survey which commenced in July 1971, is near completion (90 per cent) and gives evidence of an expansion into less accessible areas. Reported figures total 16,100 licences issued; the remaining 10 per cent of missing submissions will probably show 1,500 licences in addition. Thus the total estimate of trade stores throughout the country would exceed the previous survey in 1969 (6,390 trade stores) by 11,100.

#### *Publications*

A large part of the work done by the Department is designed to provide information and increase the knowledge of business techniques amongst local people to cater for the increasing demand from Papua New Guineans to understand commercial practices and to participate in their own businesses. Various publications have been produced for use by field officers in their extension activities in order to reach as large a number as possible.

Booklets currently available are printed in either English or Neo-Melanesian (Pidgin). Publications available from the department in both English and Neo-Melanesian are 'Trade Stores', 'How To Look After Your Outboard Motor', 'Making a Profit From Your Truck', 'Insurance', and 'Bisnis'.

Publications in English are 'Life Assurance', 'Ready Reckoner for Trade Stores' and 'Basic Commercial Forms'.

In response to a demand for more business knowledge by Papua New Guinean entrepreneurs who are not fluent in English a 'Business Terms Dictionary' has been recently printed in Neo-Melanesian.

In addition to these booklets, the co-operative magazine 'Kibi' is produced in English. A careers booklet is published annually in English as a guide to persons wishing to join the staff of this department. Radio scripts in both English and Neo-Melanesian are broadcast from both the ABC and Administration radio stations.

### CHAPTER 3

## LAND AND AGRICULTURE

### (a) LAND TENURE

#### *Ministerial Responsibility*

During the year under review the Papua New Guinea Ministry exercised full authority and final responsibility in relation to the granting of leases over Government land; the declaration of land as Government land; the acquisition of land and the reservation of acquired land for purposes within the final responsibility of the Papua New Guinea Ministry; customary land tenure conversion; surveys and mapping; valuation of land and town planning. In addition the Ministry was responsible for national parks and gardens; for Recreation Reserve Trusts and for flora and fauna conservation and surveys. The Administering Authority retained responsibility for land settlement and development policy, registered land, underdeveloped freehold land, and for the Land Titles Commission.

The Assistant Ministerial Member who was responsible for Lands and Surveys in the Second House of Assembly was Mr Andrew Andagari Wabiria, MHA. In the Third House of Assembly the Minister for Lands and Environment is Mr Albert Maori Kiki, MHA.

#### *Land Legislation*

The principal land legislation includes the *Land Ordinance* 1962-1971, the *Land Titles Commission Ordinance* 1962-1971, the *Land (Tenure Conversion) Ordinance* 1963-1967, *Lands Registration (Communally Owned Land) Ordinance* 1962 (suspended in 1970) and the *New Guinea Land Titles Restoration Ordinance* 1951-1968.

The Land Ordinance provides for the acquisition of land, including native owned land, and for the subsequent allocation of leasehold titles for the purposes of development. The Land Titles Commission Ordinance provides for the determination of ownership of native land, the Lands Registration (Communally Owned Land) Ordinance provides for the registration of communal rights to land as

directed by the Land Titles Commission, and the Land (Tenure Conversion) Ordinance enables customary ownership to be converted to individual registered title.

The New Guinea Land Titles Restoration Ordinance provides for the restoration of titles lost during the war of 1939-45.

The Land Ordinance limits dealings in native land and subjects all dealings in land other than native land to the prior approval in writing of the Administrator. Papua New Guinean owners have no power to sell, lease or dispose of traditionally-owned land, except to other Papua New Guineans in accordance with custom, or to the Government; they have, however, the same capacity as expatriates to deal in land leased from the Papua New Guinea Government.

The ordinance makes provision for Administration land to be declared native land. It also empowers the Administrator to take steps to determine the ownership of land in respect of which the title is not clear. The title of such land is decided by the Land Titles Commission.

The Administrator may acquire land by agreement or compulsory process. Special provisions are included to ensure that owners of native land are informed of any notice given under the ordinance which affects their land. Compensation is paid to the owners of land which has been acquired, including the owners of native land. If agreement is not reached on the amount of compensation the matter may be settled by arbitration or by the Supreme Court or by the Land Titles Commission.

The Land Titles Commission Ordinance establishes an independent judicial tribunal for the determination and protection of rights in land and in particular to native land. It provides for the declaration of adjudication areas and for the appointment of a demarcation committee for each adjudication area. The main function of a demarcation committee subject to any direction issued by the Commission is to prepare a plan of the adjudication area showing rights, both established and claimed, to land within the area. Each demarcation committee consists of at least 3 members of whom a majority is to be Papua New Guineans.

The associated ordinances are the *Survey Ordinance* 1969-1971 which provides for the licensing of surveyors and the conduct of authorised surveys; the *Real Property (Registration of Leases) Ordinance* 1962-1969 which



is designed to increase certainty in land tenure by allowing registrable Administration leases to be issued 'subject to survey' thus expediting the issue of registered leases; and the *Water Resources Ordinance 1962-1970* which is designed to control the use of water, assist the exploitation of water power and prevent erosion and soil degeneration in catchment areas.

#### *Classification of Land*

Lands in Papua New Guinea are classified as follows:

- (i) native land;
- (ii) freehold land; or
- (iii) administration land (including land leased to indigenous and non-indigenous inhabitants).

*Native Land.* Native land is land owned or possessed by an indigenous person or community by virtue of rights of a proprietary or possessory kind, which belongs to that individual or community and arise from and are regulated by traditional custom.

The Administration has always been aware of the importance of land to Papua New Guineans and has recognised and protected their customary rights to land in the laws of Papua New Guinea.

All unalienated land is regarded as traditionally owned until it has been demonstrated by prescribed procedures that it is unoccupied and unclaimed. This is designed to protect the interests of the local inhabitants until the position regarding ownership of land is clarified by the Land Titles Commission. Any land for which ownership cannot be proved to the satisfaction of the Commission, will be acquired by the Papua New Guinea Government.

*Land Inheritance.* There is great variation throughout Papua New Guinea in the nature of customary ownership of land. In most areas the principal interest remains in the landholding group, and individuals within the group have limited rights of use, either for life or for a shorter period. The normal system by which rights of ownership in land use are acquired is by birth into a landholding group. The transfer of rights by sale was unusual in the past but is now an established and increasing custom.

By adoption a child (or an adult) may acquire an interest in land. This provides another exception to the principle that land rights may only be acquired by birth. An

individual is usually accepted as standing to adopted parents in the full relationship of a child actually born to them and thus acquires all the rights which a community's customary land laws would allot to such a child. Adoption often involves the consent and approval of the kinship groups of one or both of the adopting parents. In the case of an individual adopted from outside the kinship group his rights to land are likely to depend on whether or not the group has agreed to the adoption.

In the past some communities were driven from their land by warfare, but, though warfare was widespread throughout Papua New Guinea, acquisition of land by conquest does not appear to have been general. The usual pattern of warfare involved raids with the subsequent return of the conquering group to its own lands. The highlands districts provide an exception to this pattern and in many parts of those areas acquisition of land by conquest was common.

Although customary rights over land are generally acquired by birth, the details of inheritance systems vary greatly from place to place and can be understood only after examination of variations in kinship organisations and differences in the emphasis placed on descent lines. A large number of Papua New Guinea's communities are organised into groups based on one or the other of the two forms of unilateral descent. In communities in which patrilineal descent is emphasised, land rights are inherited through the father; in those where matrilineal descent is emphasised inheritance is through the mother. Where both men and women are recognised as land-owners, inheritance is through either a father or mother, or both.

Rights in land owned in common by members of kinship or descent groups are acquired by the individual at birth and their acquisition is not dependent on the death of an owner.

Generally the system of succession to land rights does not vary according to individual wishes. It would not, for example, normally be possible for an individual to leave his land rights to a person outside his kinship group without adoption and the kinship group's acceptance of the person as one of its members. Also, within the group, an individual does not usually have the power to decide how his property rights are to be divided among customary heirs.

In some areas a desire for change is developing. For example, in communities in which inheritance is based on matrilineal descent, an



increasing number of men want their own children to succeed to their land rights. Again it is natural for progressive individuals who have planted perennials or made other improvements to their land to hope to be able to pass rights to such improvements to their own children as individuals rather than as members of a group.

*Land Ownership.* House sites in villages and hamlets are allotted to individual heads of families except that where such community buildings as 'men's houses' exist, the latter are the joint property of extended families, lineages or clans. In the case of individual family houses, allotment of sites usually involves the grouping together of the homes of members of a descent group.

Land used for gardening is in some places individually-owned but in others is the common property of descent groups, such as lineage or clans, within the community. Where descent groups own the land, particular garden plots for each family may be allotted seasonally by agreement of all members of the owning group, and no individual or family would have a specific claim to any particular portion of the group-owned land.

Where group ownership of garden land exists, there are gradations, based on seniority, in the influences of various members of the group and consequently variations among them in the control of land. At times it may be possible to discern one person who clearly has the greatest amount of control in the group-owned areas, but he is more in the nature of the chief spokesman in land matters and behind him are a number of other people who must also be considered as the owners.

In some communities individually-owned and group-owned garden land can be found side by side. For example, bush land newly cleared for a garden for the first time may be considered the property of those organising the clearing, while the older garden areas are recognised as the joint property of members of the kinship group.

Hunting and collecting lands outside the garden areas are usually common property not of a kinship group but of local groups such as villages. Similarly, fishing and other rights over reefs and water are owned in common by those who have, by birth, the right to reside in a particular village.

At times, it is necessary to distinguish between ownership of land and ownership of what is on land. It frequently happens that

permission is given to people to plant useful trees and palms on land other than their own and custom recognises such trees and palms as belonging to the planters and their heirs.

*Land Use.* Land use must often be distinguished from ownership. Members of many communities often allow others temporary or seasonal use of their land, though they are very firm indeed when the matter of actual ownership arises. It may happen under a community's garden system that most of the members cultivate each season land which is owned by others. In some communities, it is the practice for all gardens to be made within a common fence on land owned by a few individuals or kinship groups, but used for a season by a large number of families. In subsequent years gardens will be made on the land of other individuals or other descent groups.

Methods of land use employed by people are described in Part (b)—Agricultural Products—of this Chapter under the heading *Traditional Cultivation Methods and Techniques*.

*Land Tenure Reform.* The Administering Authority is aware that customary land tenure is not satisfactory for economic progress as it frequently lacks the flexibility needed to encourage land development. A system which gives clear and transferable title to the land is likely to provide greater incentives for progress. The present laws have been designed to give the greatest possible opportunities for land development by the indigenous people consistent with respect for their wishes. The title given enables the owner to mortgage his land although the rights of the mortgagee are restricted.

The following principles have been adopted as the basis of policy:

- (i) The ultimate and long-term objective is to introduce throughout Papua New Guinea a single system of landholding regulated by statute, administered by the Department of Lands, Surveys and Mines and providing for secure individual registered titles.
- (ii) The Administrator working through the Department of Lands, Surveys and Mines and the Registrar of Titles may issue and register land titles.
- (iii) Land subject to customary rights or ownership remains subject to custom only until it is taken out of custom either by

acquisition by the Papua New Guinea Government or by the process provided for by the *Land (Tenure Conversion) Ordinance 1963-1967* of conversion of title to an individual registered title.

(iv) Upon acquisition compensation is provided.

(v) Land held under customary rights or ownership may not be required outside traditional custom except by the Papua New Guinea Government.

(vi) For the time being land may not be acquired by the Government unless the traditional owners are willing to sell, and in the opinion of the Government, the land is not required by them; and conversion of title may take place only if all of those who have an interest in the land under traditional custom consent to the conversion.

(vii) The services of Land Titles Commissioners are to be used as a first priority on investigation into the ownership under traditional custom of land proposed for acquisition by the Government, on settlement of disputes about the ownership of land held under traditional custom; and on investigations into the customary rights in land proposed to be converted to individual registered title. To the extent that the time of the Commissioners is not fully occupied with this work, they should continue investigations into the holding of land under traditional custom and the results of such investigation are to be recorded for use in connection with future acquisitions or conversions of titles.

The *Land (Tenure Conversion) Ordinance 1963-1967* provides for the conversion of the tenure of traditional land according to custom into individual tenure in fee simple registered under the *Land Registration Ordinance 1924-1969*.

*Registration of Native-owned Land.* Provision for the investigation and recording of rights and interests in native land is contained in the *Land Titles Commission Ordinance 1962-1970* and in the *Lands Registration (Communally Owned Land) Ordinance 1962*. The former ordinance establishes a Land Titles Commission which is required to hear claims and disputes or to carry out investigations on its own initiative relating to rights and interests in traditional land, and to survey the boundaries and determine the ownership of local land. Findings must be forwarded to the Registrar of Titles for registration.

Priority is being given to investigations in those areas where the main agricultural development has taken place, e.g. in New Britain, Morobe, Madang, Bougainville and New Ireland and in the densely populated areas of the Highlands.

*Acquisition of Native Land.* The most important safeguards to the land rights of the Papua New Guinea people are that no land held under customary tenure can be acquired from the traditional owners except by the Government. Provision exists for compulsory acquisition only for defined public purposes. The Government may not otherwise acquire or assume title to native land without the freely obtained consent of the owner. The Land Ordinance also requires the Government to be satisfied after reasonable inquiry, that the land is not required or likely to be required, either immediately or in the foreseeable future, by those on whom the land may devolve by custom.

The acquisition of land from traditional owners is supervised by the Department of Lands, Surveys and Mines which consults with the Division of District Administration, and the Departments of Health, Agriculture Stock and Fisheries, and Forests in regard to the present and prospective needs of the Papua New Guinean people and the best economic use for any land acquired.

Before assessing the area of land required by a community to meet its present and future needs the Government makes an investigation to determine ownership according to custom, the area of arable land owned by the community and population trends. Consideration is also given to the subsistence pattern, whether it is entirely agricultural or includes collecting, hunting or fishing; and to what extent the pattern has been modified by the introduction of new foods, cash-cropping and improved agricultural techniques; to the ecology of the area; and to the probable future economic advancement of the people including their capacity to undertake greater responsibility in land management and utilisation.

All land to be purchased is valued by a qualified valuer, and his assessment forms the basis for the price offered by the Government. The price for rural land is based on agricultural or pastoral potential, accessibility and terrain. The price for urban land varies according to demand and locality.

### *Freehold Land*

Only leasehold tenures are granted over Administration land; no provision exists to permit a grant of the freehold of such land. Administration land can, however, be declared native land in the possession of a particular owner who may apply under the *Land (Tenure Conversion) Ordinance 1963-1967* for its registration in his name as the owner of an estate in fee simple.

Table 1 of Appendix VIII shows the amount of freehold land held by expatriate inhabitants. Almost all of this was alienated during the period preceding Australian administration. It seems probable that in some areas a further amount of alienation had taken place before 1942, but records available do not disclose ownership and determination of ownership must therefore await the findings of the Land Titles Commission.

### *Administration Land*

This comprises:

- (i) land to which the Administration succeeded in title following the acceptance of mandatory powers by the Commonwealth Government after World War I;
- (ii) land purchased by the Government;
- (iii) land acquired by the Government for public purposes.

Administration land is, in effect, a reserve of public lands held in trust and will eventually come under the control of whatever political entity ultimately emerges in Papua New Guinea.

The Administrator is empowered by the *Land Ordinance 1962-1971* to grant leases and licences of various types. Applications for leases are first considered by the Land Board established under the ordinance which makes a recommendation to the Administrator on whom it considers should be the successful applicant.

The Land Board consists of a chairman and two other members together with such other members as the Administrator may consider it necessary to appoint to act in relation to land in particular localities. Papua New Guinean members are appointed to assist in this way.

The principal types of lease which may be granted are:

- (i) agricultural leases for any period not exceeding 99 years and subject to stocking conditions;

- (ii) pastoral leases for any period not exceeding 99 years and subject to stocking conditions;

- (iii) leases of allotments for business and residential purposes for any period not exceeding 99 years; these leases incorporate improvement conditions requiring the erection and maintenance of buildings;

- (iv) special purposes leases, where the Administrator considers that a grant of a lease under any other category would not be appropriate, for any period not exceeding 99 years;

- (v) mission leases to enable the erection of buildings required for specified mission purposes, or for gardens or pastures ancillary to those purposes, for any period not exceeding 99 years (rent is not payable on a mission lease); and

- (vi) town sub-division leases for purposes consistent with the general plan for the development of the township and provided undue expense to the Government will not be involved in the provision of electricity, water and other services for any term not exceeding 5 years.

Licences to enter Administration land may also be issued for various purposes. Licences remain in force for a period not exceeding 1 year and are subject to such conditions as may be prescribed.

The Land Development Board, details of which are given below, examines land available for agricultural and pastoral development and prepares a land-use plan dividing the land into areas of a size suited to the best use of the land. Agricultural and pastoral leases are granted in accordance with the plan.

*Acquisition of Land for Public Purposes.* The Land Ordinance enables the Government to acquire or resume land for any of a number of specified public purposes, including a purpose connected with agricultural experiment and demonstration, communications, conservation of resources, defence, generation of electricity, industrial development, navigation by land, water or air, public health and public safety.

This provision applies to land held in fee simple, land held under lease, licence, or permit from the Government, and to native land. Before acquiring land by compulsory process the Administrator is required to have served on each of the owners of the land, or such of them as can after diligent inquiry be

ascertained, a notice inviting the owner to treat with the Administrator for the sale to the Government of the owner's interest in the land. After a period of two months, the Administrator may, by notice in the *Gazette*, declare that the land is acquired by compulsory process for a public purpose specified in the notice, and on the date of such acquisition the interest of any person in the land is converted to a right to compensation. Compensation by arbitration is provided for, and upon application by the Government, or any other person interested, the Supreme Court may adjust rights and order the basis upon which compensation is to be determined.

No land was acquired for defence purposes by this process during the year.

*Acquisition of Land by Negotiation.* Native land purchased by the Government during the following 5 years totalled:

| Year      |    |    | Hectares |
|-----------|----|----|----------|
| 1966-1967 | .. | .. | 65,062   |
| 1967-1968 | .. | .. | 55,094   |
| 1968-1969 | .. | .. | 28,467   |
| 1969-1970 | .. | .. | 13,177   |
| 1970-1971 | .. | .. | 25,114   |

*Reservation of Land for Public Purposes.* The Land Ordinance provides that the Administrator may from time to time grant in trust, or by proclamation reserve from sale or lease, either temporarily or permanently, any Administration land which in his opinion is or may be required for public purposes specified in the Ordinance or for any other purpose which may be approved by the Administrator.

*Transfer of Non-native Land to Papua New Guineans.* Any Papua New Guinean or group of indigenous people may apply for land in accordance with the requirements of the Land Ordinance. Any such applications will be considered by the Land Board on their merits.

Special settlement areas with low building covenants exist in Wewak, Lae, Madang, Kavieng, Lorengau, Goroka, Wau and Mount Hagen.

Under the provisions of the Land Ordinance, owners (including traditional Papua New Guinean owners) of other than native land, whether freehold or leasehold, are able to sell or otherwise dispose of their interests in the land. This permits them to obtain finance against the security of their land, e.g., under the Native Loans Fund Ordinance or the Ex-Servicemen's Credit Ordinance or from a bank.

This is designed to facilitate the extension of cash-cropping.

The Development Bank Established under the provisions of the *Papua and New Guinea Development Bank Ordinance 1965-1969* which came into operation on 23 June 1966, took over the functions of the Native Loans Board on 1 April 1969 and the Ex-Servicemen's Credit Board on 1 January 1969 respectively.

#### *Land Development Board*

The functions of the Land Development Board, which is a non-statutory body, are to advise the Administrator on all matters connected with land settlement and sub-divisional surveys; to draw up an annual programme, with priorities for reconnaissance and sub-divisional surveys; and to determine a land-use plan for Administration land or land in process of being acquired by the Government. Surveys and priorities are based on Papua New Guinea Government policy regarding the extension of certain crops, and particular emphasis is placed on making land available to the Papua New Guinean people under individual tenure.

Agricultural blocks made available to individual Papua New Guineans in accordance with the above policy totalled 727.

The members of the Board are the Economic Advisor, Department of the Administrator, as Chairman; the Director of Lands, Surveys and Mines; the Secretary, Department of the Administrator; the Director of Agriculture, Stock and Fisheries; the Director of Forests; and the Treasurer and the Secretary, Department of Transport.

The acquisition of land from the Papua New Guinean people is not within the province of the Board. Discussions are at present largely of a technical nature and no Papua New Guinean member has yet been appointed.

#### *Registration of Titles*

A system of registered titles and interests in land is provided for under the *Land Ordinance 1962-1969*. The *New Guinea Land Titles Restoration Ordinance 1951-1968* enables the compilation of new registers and official records relating to land, mining and forestry, in place of those lost or destroyed during the war of 1939-1945.

Title restoration work proceeded and during the year 13 final orders and 5 provisional orders were made.

## (b) AGRICULTURAL PRODUCTS

### *Ministerial Responsibility*

During the year under review the Papua New Guinea Ministry exercised full authority and final responsibility over virtually all matters related to Agriculture, Stock and Fisheries. The Administering Authority retained responsibility for tertiary training at the Vudal Agricultural College, the Cocoa and Coffee Appeal Committees, and for the administration of the Australian Fisheries Act and the Continental Shelf (Living Natural Resources) Act.

In the Second House of Assembly the Ministerial Member for Agriculture, Stock and Fisheries was Mr Tei Abal, MHA. In the Third House of Assembly the Minister for Agriculture, Stock and Fisheries is Mr Iambakey Okuk.

### *Principal Types and Methods of Agriculture*

As well as being responsible for a large proportion of Papua New Guinea's export income, agricultural production provides the vast majority of Papua New Guineans with their subsistence requirements and the basic income needed for their economic advancement under changing economic conditions.

The main forms of agriculture practised are:

- (i) production for subsistence, under a system of bush and grassland fallowing, of root crops as a staple, and supplementary minor crops such as maize, beans and various types of fruit and vegetables;
- (ii) the production of dual-purpose crops (e.g. peanuts and rice) for both food and sale, allied with the cash sale of the surplus of subsistence crops such as banana, sweet potato, taro and yam; and
- (iii) the plantation production of such perennial crops as coconuts, cocoa, coffee, oil palm, tea and rubber for export.

Although in the past the production of plantation-type crops has been mostly in the hands of expatriate producers, there has been a very rapid growth of Papua New Guinean participation in these industries in recent years. As a result of agricultural extension programmes Papua New Guinean cultivators now control about three-quarters of the area planted with coffee, and now have more than half the production potential in the commercial coconut industry. Many of the plantings are still immature, and it will be some years before they actually begin to produce. Additional details of participation by Papua New

Guinean producers in these industries are shown in the statistics provided in Appendix VIII.

### *Traditional Cultivation Methods and Techniques*

Although Papua New Guinean farmers are developing new skills and are increasingly undertaking the specialised production of particular crops as a means of raising their living standards, subsistence production is regarded as an economic sheet-anchor which will ease any difficulties which may be encountered in particular industries during the period of transition.

There are many ways in which production efficiency might be increased, but, lest any of these should in the long term contribute to the destruction of agricultural resources, caution must be exercised in introducing changes. The Papua New Guinea Government therefore continually surveys agricultural conditions among farmers and aims its extension programmes at an evolutionary development of Papua New Guinean agriculture based on the valuable and conservational aspects of the existing system. For example, the present basic system of bush or grass fallowing is inefficient in that it requires a major clearing effort each time a crop is planted, but is conservational in that the rapid re-growth which takes place in gardens tends to preserve the soil from physical and chemical degradation. Extension programmes aim at showing farmers that by practising a rotation on each clearing, instead of growing only one crop before permitting the land to revert to bush or grass fallow, they can considerably reduce the labour involved in food production. It has been found that soil fertility is by no means the only factor governing traditional agricultural practice and that other difficulties such as rapid increase in pests and diseases, combine to make successive cropping with a single staple unsuitable. The lack of foods suitable for storage makes the local people dependent on day-to-day harvesting of the perishable staples and subject to the effects of seasonal variations. Farmers are therefore encouraged to expand the production of such storage crops as rice and peanuts which are suited to traditional subsistence methods. The use of ground covers of quick-growing leguminous trees, which provide only a minor clearing problem, as a substitute for volunteer growth is also encouraged. It is not yet known exactly to what extent a complete resting period for soils can be deferred.

The production of staple foodstuffs is usually closely linked with the social structure and magico-religious beliefs and practices of the communities concerned. Tastes, prejudices, fear of contamination of themselves and of their agricultural land, and the fear of relying on unfamiliar crops are all difficulties in the way of any attempt to diversify and improve the efficiency of indigenous agriculture. Training programmes in new methods and in the value of new and varied foods, however, help to hasten their adoption.

A different kind of problem arises with the expansion of perennial crop planting for cash production. Perennial crops are of minor importance in the traditional subsistence economy, and, as land tenure systems tend to correspond with the land use methods for the production of the annual staples, the location of groves of perennials has little relation to land ownership. Because of inheritance difficulties, problems of communal ownership, and the tendency for holdings to become fragmented, customary systems of land tenure do not lend themselves to the development of cash cropping with perennials, particularly where formal spacing and techniques other than grove plantings are adopted. Change may take some time to effect as some Papua New Guinean communities are extremely wary of any suggestion of replacing traditional tenure. Meanwhile, however, new systems of planting can be introduced side by side with subsistence production, provided there is no widespread development of permissive occupancy planting outside the land boundaries of effective social units.

In areas where traditional activities, particularly burning for hunting in lower rainfall regions, have caused serious deterioration of soil and vegetation, agricultural extension programmes include measures for land reclamation and conservation. A major programme of this type, which includes the control of burning, encouragement to refrain from cultivating hilltop and watershed areas, and the reforestation of degraded grassland country with suitable tree seedlings, has been in progress in the Highlands Districts for several years. The programme has the support of the farming population, who have planted out under supervision many thousands of tree seedlings of *Araucaria*, *Casuarina*, *Eucalyptus* and *Pinus* species, and has resulted in the natural regeneration of vegetation throughout degraded and eroded areas; in some of these there are now fairly dense stands of young secondary forests.

It has become obvious that *Casuarina* species are the most suitable for land improvement work over a wide range of soil types and climatic conditions in the highland areas and the planting of *Casuarina* spp. on old garden land and degraded grasslands has become an accepted practice.

#### *Status of Traditional Agriculture*

In recent years active and expanding extension programmes have had a noticeable influence on indigenous agriculture. Since about 1956 there has been an increasing diversification of subsistence and cash cropping. Statistics provided by Appendix VIII demonstrate the increasing role of the Papua New Guinean grower in the production of the principal commercial crops in the country.

There continues to be a marked expansion of the area and production of individual farms, and a greater understanding of the relationship between the increased production and increased income. Previously, even when new crops were introduced or larger blocks of a particular crop were achieved by co-operative effort, the area worked by individual farmers did not increase. The increase in the size of blocks cultivated by individual farmers is particularly evident in the cacao plantations of the New Britain Districts and in the coffee plantations of the Eastern Highlands and Western Highlands Districts while a similar expansion has been associated with the mechanised production of annual crops in the Markham Valley area of the Morobe District.

Of special significance has been the development of individual farms completely outside the tribal agricultural system in several Districts, where farmers have taken up blocks on Administration land and have been granted formal leasehold tenure.

Statistics of production of cash crops are collected by the Department of Agriculture, Stock and Fisheries annually.

#### *Evaluation and Development of Papua New Guinea Agriculture*

The main objectives of the agricultural development programme for Papua New Guinea are:

- (i) To improve traditional agricultural methods and so increase the total volume and variety of production and the nutritional intake of the people;
- (ii) To increase the production of such commodities as rice, meat, fish, dairy products and fresh fruit and vegetables which are all

imported in varying quantities at the present time; and

(iii) To increase the production of certain agricultural crops and marine products for export.

During the year the production of food-stuffs continued to increase, with a better distribution of surplus production to adjacent areas, when consumption needs warranted. There have been no significant changes in production trends of the various principal cash crops. The proportion of principal crops produced by Papua New Guinean growers continue to increase.

The Highland crops, passionfruit and pyrethrum, are exclusively grown by indigenous producers. The passionfruit produced in areas around Mount Hagen, Chimbu and Goroka is processed at the factory established at Goroka in 1958; a new factory extension was opened in March 1970 at West Goroka. Pyrethrum flowers are processed at the factory and extraction plant established at Mount Hagen in 1965.

Rice promotion takes the form of providing growers with new and improved varieties, advanced techniques, and services wherever production takes place. The main centre of activity is the Sepik District, with an increased interest being shown by growers in the Markham Valley, Morobe District. Some interest continues in the Mekeo area, Central District.

#### *Agricultural Research*

The Division of Research and Surveys of the Department of Agriculture, Stock and Fisheries is responsible for all agricultural research and investigation. The specialist technical sections, except those engaged in livestock research, are attached to this division.

Agronomic research is decentralised, staff being based on experimental stations throughout Papua New Guinea. Most specialist staff work at central laboratories in Port Moresby but several, particularly entomologists, work at experimental stations or other centres.

The main research and administrative activities are as follows:

(i) the promulgation and administration of legislation concerned with plant quarantine and the control of pests, diseases and noxious weeds;

(ii) introduction and testing of new crop plants, pasture plants, and new varieties of established economic species;

(iii) crop improvement and agronomic experiments with all crops grown in Papua New Guinea;

(iv) production of high grade seed and planting material;

(v) investigation of farming systems;

(vi) research on crop processing methods;

(vii) design and operation of model crop processing facilities and testing of new processing machinery;

(viii) soil and land use surveys;

(ix) research and services in plant pathology;

(x) research and services in economic entomology;

(xi) chemical and biochemical services and research; and

(xii) fisheries surveys and research in fisheries biology (further details of fisheries are set out in Chapter 5 of Section 4 of this Part).

There are seven agricultural experiment stations which carry out investigations in plant improvement and also serve as demonstration centres for all phases of crop husbandry.

The main crops studied at the Lowlands Agricultural Experiment Station, Keravat, near Rabaul, are cacao, coconut, food crops, Robusta coffee; at the Highlands Agricultural Experiment Station, Aiyura, in the Eastern Highlands—Arabica coffee, food crops and pastures; at the Agricultural Experiment Centre, Bubia, near Lae—rice, pastures, sugar cane, food and stockfeed crops, spices and other natural products; at the High Altitude Experiment Station, Tambul, in the Western Highlands—pyrethrum, food crops and pastures. The other smaller stations are concerned with individual crops; they are the Rubber Centre, Bisianumu, near Port Moresby; the Experimental Tea Plantation, Garaina; and the Tea Research Station, Kuk, Mount Hagen. The station at Kuk is now well established with the building programme nearly complete and several field trials in progress.

#### *Plant Pathology and Microbiology*

The headquarters of the Plant Pathology section is at Port Moresby where three pathologists are working on diseased materials from all parts of Papua New Guinea. Another pathologist is stationed at the second laboratory at Keravat in New Britain.

During the year the Port Moresby laboratory handled 431 accessions from the general public, agricultural officers and from collections. Isolation and identification of organisms from the various accessions were carried out at Port Moresby and portions of some of the collections were sent to the Commonwealth Mycological Institute, Kew, and to the Royal Botanic Gardens, Kew, England for lodging and confirmation of identification. Some specimens, slides, cultures and photographs were sent to other specialists overseas.

Readings on cacao dieback continued to be taken on the trials in the Gazelle Peninsula, and rainfall records continued as well, as part of the study to determine whether any relation in dieback incidence occurs with fluctuations in rainfall.

Indicator plots were continued at the Lowlands Agricultural Experiment Station at Keravat, in order to determine the incidence of infections at various sites at the locality, in comparison with those being recorded in the trial in the East Gazelle area. Readings on all the blocks are being taken fortnightly.

One indicator block was also continued at a different site in the Pependetta district, in order to determine the incidence of the disease throughout the year, and to detect correlations with rainfall if such occur.

Trials of compounds with possible systemic action against dieback in cacao were continued on both young and old trees in the field, at ranges of concentration to suit the separate chemicals. Some of the experiments included seeds soaked in some of the compounds. Most experiments were preceded by preliminary tests to determine phytotoxicity levels.

During the year patrols continued throughout the areas where coffee had been eradicated in connection with the attempt to eliminate coffee rust, caused by *Hemileia vastatrix*, the outbreak of which occurred in 1965. During the patrols any volunteer coffee seedlings or coffee regrowths which were located were destroyed. None, however, was found with rust.

A slight extension of the area in which blister smut of maize, caused by *Ustilago maydis*, occurs was noted. The measures recommended for the control of the disease have kept incidence at any site fairly low.

Surveys were commenced on the species of *Phytophthora* and *Pythium* in the soils of

various regions, and of the fungi forming mould on stored food.

The service conducted by the Department of Agriculture, Stock and Fisheries consisting of the supply of cultures of *Rhizobium* free of charge to all growers continued. The main requirements were again for cultures of *Rhizobium* for *Leucaena leucocephala*, *Centrosema pubescens* and *Pueraria phaseoloides* but strains for other tropical legumes were also supplied. Inoculum trials of various legumes with uninoculated controls were again shown in selected parts of Papua New Guinea in order to determine the effectiveness of *Rhizobium* strains in the field.

#### Agricultural Chemistry

The Chemistry Section is organised on the basis of two sub-sections: Plant Nutrition and Agricultural Chemistry.

The Plant Nutrition Section operates from the headquarters laboratory at Konedobu, Port Moresby, and the Keravat Laboratory in East New Britain. The Agricultural Chemistry Laboratory operates from a laboratory at Hohola, Port Moresby and another at Lae.

The Plant Nutrition Section is responsible for all analyses of foliar material and soils pertaining to nutritional studies and field trials, and provides a soil analytical service for land utilisation and settlement investigations carried out by other branches.

The Section is also conducting an extensive plant nutrition survey which has encompassed the Districts of New Ireland, Madang, Eastern Highlands, Western Highlands, Milne Bay, Northern, Gulf and Central and is currently engaged in a survey of the Western and Bougainville Districts. The next phase of the survey will include the Morobe District but a great deal of planning is still required to establish suitable pasture evaluation methods before this phase can commence.

Collation of data and preparation of research publications in connection with the completed plant nutrition surveys is at an advanced stage.

The Agricultural Chemistry Section is responsible for general analytical services and investigations covering a wide range of materials, including foods, fodders, pastures, spices, essential oils, insecticides, fertilisers and agricultural produce.



The Agricultural Chemistry Section provides general chemical services for agricultural field staff and also fulfills the functional needs of the Papua New Guinean Government in connection with analytical services.

Investigations aimed at improving the quality of agricultural produce were continued with particular emphasis on cocoa, copra, rice, pyrethrum, sweet potatoes and yams. The programme to promote the introduction of new crops such as pepper, ginger, mint, cardamom, nutmeg, cinnamon, bixa, capsicum, patchouli and vanilla proceeded. The provision of gas chromatographic equipment has facilitated the investigations relating to these crops and improved produce quality control.

Infra red analytical facilities are to be introduced during the next financial year.

A monitoring programme of metal residue contents of the metals mercury, arsenic and lead in fish and prawns caught during studies of the biology distribution and abundance of fish and prawn populations by the Fisheries Research Section, was initiated during the year.

#### *Economic Entomology*

The Entomology Section is staffed by 9 technical officers stationed at Keravat, Kuk near Mt Hagen, and Bubia near Lae, Popondetta and at the headquarters of the Department of Agriculture, Stock and Fisheries at Port Moresby. At Keravat and Popondetta, field trials are conducted for the control of the more important insect pests of cacao and coconuts. Rice and sugar-cane pests are being studied at Bubia while at Kuk, pests of tea and vegetables are investigated. A general insect register and an insect pest register are maintained at Port Moresby and a reference collection is being built up. Materials for taxonomic study and identification are forwarded to more than 40 overseas specialists.

A complete checklist of Papua New Guinea's insect pests of plants has been prepared for publication, which is expected during the coming year.

The coconut, which is the most widely cultivated commercial crop in Papua New Guinea, has several major pests. Dynastid beetles are probably the most serious primary pests of this crop. The Asiatic rhinoceros beetle *Oryctes rhinoceros* L., which is believed to have been accidentally introduced to the Bismarck Archipelago during the last war, has not yet invaded the mainland of Papua New

Guinea and Bougainville. Indigenous rhinoceros beetles, principally subspecies of *Scapanes australis* Boisd., occur in coconut growing areas throughout Papua New Guinea and cause serious damage in some localities.

Studies on the life history and ecology of rhinoceros beetle on New Britain have been concluded by an entomologist of the South Pacific Commission working in co-operation with the Department of Agriculture, Stock and Fisheries at Keravat.

Chemicals control against both introduced and indigenous dynastids is carried out by individual treatment of the palms with insecticides, mainly BHC dust.

Distribution of the assassin bug, *Platymeris laevicollis*, from Keravat, has been suspended pending evaluation of its establishment or otherwise in release areas.

The palm weevil *Rhynchophorus bilineatus* (Montr.) attacks palms which were damaged primary by dynastids or wounded in various ways. Preventive measures such as treatment of wounds with coal tar are most useful against this pest. Studies are being made of the importance of other weevil species, including *Rhadoxseclus obscurus* (Boisd.) and *Sparganobasis subcruciatu*s (Mshl.), which are sometimes found associated with unthrifty or dying palms.

Of the 2 major hispid pests of coconut, *Brontispa longissima* (Gestro) causes damage to young palms in many districts throughout Papua New Guinea. Control is achieved with a 0.1 per cent lindane spray repeated every 6 weeks. The coconut leaf-mining beetle, *Promecotheca papuana* (Csiki), although recorded elsewhere in Papua New Guinea, causes severe damage only to some parts of New Britain.

'Sexava' grasshoppers (Tettigoniidae) can defoliate palms of all ages. They are most serious in the Admiralty and the Bismark Islands, but also cause damage in some mainland areas. Eggs parasitised by *Leefmansia bicolor* (Waterst.) or other small hymenoptera are introduced to localities suffering severe outbreaks. Ecology and control of 'Sexava' is being investigated in a series of trials on the Admiralty Islands.

*Pantorhytes plutus* (Oberth) on New Britain is the most important pest of cacao. A detailed study of its life history, behaviour and control is in progress at Keravat.

Pod-sucking insects cause substantial losses, despite being easily controllable by spraying or dusting with lindane. The mirid *Pseudodoniella typica* (Ch. & Carv.) is serious in the New Britain District while *Amblypelta cocophaga* China (Coreidae) causes damage on Bougainville.

Population of defoliating caterpillars, principally the noctuid *Achaea janata* L. and the geometrids *Ectropis* spp., were generally low on cacao during 1971-1972.

Studies on the life history and control of the bark feeding xyloxyctid *Panseptia teleturga* (Meyr.) were continued at Keravat. Caterpillars of this species have severely damaged cacao in parts of the Gazelle Peninsula since the early 1960s.

*Coffea canephora* has still no major pests. *Meroleptus cinctor* (Mshl.), the coffee girdler weevil of the Eastern Highlands, for some years a major pest of *Coffea arabica*, is now well under control.

In the Morobe, Eastern and Western Highlands *Coffea arabica* under leucaena or *Crotalaria sempervirens* shade has sometimes suffered heavy damage from armyworm caterpillars of the noctuid *Tiracola plagiata* (Walk.) and/or loopers (*Ectropis* sp.). No significant damage has been observed where other shade species have been used. Biological and cultural control measures are being investigated.

Insect surveys are undertaken periodically in oil palm development areas near Cape Hoskins, New Britain. No serious pest problems have yet arisen on the crop, although the scarlet mite, *Brevipalpus californicus* (Banks), has caused some concern. The relationship between spear rot of oil palm and attacked by stratiomyid flies (*Hermetia illucens* L.) is being investigated.

The campaign for the eradication of the introduced giant termite *Mastotermes darwiniensis* (Frogg.) in the Lae area has continued.

#### Land Utilisation Section

In the Soil Physics subsection studies of clay mineralogy identification and surface charges relating to phosphate retention continued. Liaison with the University of Papua New Guinea allows for X-ray diffraction identification to back up optical and differential thermal apparatus investigations.

Field work of the broad reconnaissance surveys of the Commonwealth Scientific and Industrial Research Organisation covered the

Malalaua, Karimui and Kundiawa areas of the Gulf and Chimbu Districts.

The major land use survey embraced some 120,000 hectares of the Markham Valley between the Erap and Ramu rivers. Problems relating to high pH, carbonate and bicarbonate content, and associated nutrient imbalances were investigated in conjunction with other sections of the department. Drainage reclamation in the peat soils was confined to new planting areas of Kuk Tea Research Centre. Trials establishing cover crops on land cleared of forest cover were continued in West New Britain.

#### Agronomy

**Coconuts.** The aims of the coconut improvement programme have been reviewed fully in previous reports. The main investigations underway are fertiliser and strain testing trials.

Trials in New Ireland continue to show good response to potassium and evidence of response to sulphur. Use of fertiliser by private producers has greatly expanded.

Trials with young seedlings in the Gazelle Peninsula, New Britain, and in Papua have shown good responses to nitrogen and sulphur. Trials with young palms in the Markham Valley in the Morobe District have given similar results. Trials in the Madang District with sulphur, manganese and iron have shown major response to sulphur but not to the other elements. The variety trial comprising a range of Papua New Guinea cultivars and also strains from the New Hebrides, British Solomon Islands Protectorate, Ceylon and Singapore, has made good progress and the first fruits have been harvested. Large differences in size and composition of fruit are evident.

A trial at Keravat showed great improvement of growth of young seedlings which were cleanweeded and fertilised and further trials have been laid down to study methods of improving early growth in the field.

**Cacao.** Research continued to concentrate on studies of resistance to dieback and methods of protecting young seedlings from infection. Trials comparing dieback resistance of clones and progenies produced clear evidence of differences between clones but results with progenies were less clearcut. Planting material of selected clones is being distributed on a substantial scale.

A seed garden has been established for production of Amazonian Trinitario hybrid seed.

Results of cultural trials have led to revised recommendations on spacing and shading, and work continues on fertiliser trials which indicate good returns from nitrogenous fertilisers under some conditions.

Research is in progress at Keravat on processing techniques for production of 'flavour' cocoa.

*Coffee.* The work with *Coffea arabica* is centred on the Highlands Agricultural Experiment Station, Aiyura.

Trials cover varietal testing and progeny testing within varieties, as well as such cultural factors as fertilising, pruning, spacing, shading and use of herbicides. Good responses have been obtained from fertilising, especially with potassium, and private growers are using fertiliser extensively, with excellent results. Evidence has been obtained of minor element deficiencies (zinc and boron) but foliar application of zinc sulphate reduced yields. Trials continue with the aim of elucidating the complex nutritional situation. Herbicide trials have shown chemical weed control to be efficient and economical and herbicide usage is rapidly increasing.

At Keravat, trials with *Coffea canephora* include progeny testing and studies of spacing and pruning techniques.

*Rice.* Varieties from the International Rice Research Institute, Manila, again gave excellent yields under favourable conditions, but in several locations the growing season proved too short. The good performance of International Rice Research Institute varieties has stimulated more extensive rice plantings in several localities.

The rice research programme has been transferred from Bereina to Bubia. Trials are in progress to determine whether the high pH soils and stream waters of the Markham Valley are suitable for irrigated rice production. Trials in the Sepik District are studying varieties and techniques for dryland rice production at the village level.

*Pastures.* The introduction of suitable pasture species and the establishment of collections and testing experiments continued in the dry belt of the Markham Valley, at the Highlands Agriculture Experiment Station and at the High Altitude Experiment Station, Tambul.

Highly productive species can now be recommended for most environments but continued study aims at finding improved grass-legume combinations. Studies of pasture management techniques are in progress.

*Tobacco.* Small-scale commercial tobacco leaf production continued in the Highlands.

Trials of flue-cured tobacco production in the Eastern Highlands District, and the Central and Northern Districts have shown the Eastern Highlands to be the most suitable area for production. Commercial production has begun.

*Pyrethrum.* The initial station development work at Tambul has been completed and the research programme is progressing. Phosphate deficiency reduces yields in many areas and fertilizer use is being encouraged. Improved seed is being distributed from Tambul and the research programme provides for continuous upgrading of the quality of the seed supplied.

*Tea.* Large numbers of clonal selections are undergoing testing at Kuk. Nutritional trials have been conducted with both cuttings and nursery seedlings and a series of nutritional trials has been laid down in different localities to determine optimum fertilizer usage for plucking tea. A planting density trial has been effected and areas of bulk tea have been established to provide material for future trials.

*Food Crops.* Traditional methods are generally adequate to provide carbohydrate requirements of village people and research has therefore concentrated on situations demanding more intensive farming. Protein requirements may be most readily supplied by use of livestock and attention has been given to production of pig and poultry feeds as well as human food. Fertiliser and cultural trials are in progress with sweet potato, soybeans, maize, sorghum and peanuts.

*Oil Palm.* Pilot plots established at various sites in Papua New Guinea for observation on performance in different environments are now in bearing. An agronomist stationed at Cape Hoskins, in New Britain, is conducting cultural and nutritional trials in association with the developing industry and is assisting in the establishment of an oil palm breeding station which will ultimately meet Papua New Guinea's requirements of high quality seed.

*Rubber.* The Rubber Centre, Bisianumu, provided budwood of introduced high yielding clones, and produced clonal seed from a 40-acre polyclonal seed garden. Smaller seed

gardens in the Sepik and Northern Districts also produced substantial quantities of seed in 1972 and for the first time local seed production was in excess of planting requirements. At Bisianumu, a tapping frequency trial and tapping trials to compare yield of introduced clones, continued.

*Natural Products.* Observations continued on a variety of crops such as vanilla, pepper, cardamom, nutmeg, cinnamon, mints, damascene rose and cinchona. The aim is to diversify production, and to find suitable cash crops for people in the less accessible areas of Papua New Guinea.

*Sugar Cane.* Agronomic studies in the Markham Variety have shown that selected varieties are capable of giving high sugar yields in experimental plots and that pests and diseases do not present insurmountable problems. An observation block of 25 hectares has made good growth and results to date indicate that the crop could be grown successfully from the agronomic view point. The study is being followed up by an intensive land use survey of the area that might be suited to sugar cane and by detailed economic analyses.

#### *Plant Introduction*

The Plant Introduction Section is responsible for the introduction of plants from overseas, as required for departmental projects, and for post-entry quarantine of introduced plants, including plants introduced under permit by other departments and private persons and organisations. Quarantinable introductions are grown under observation at the Plant Introduction and Quarantine Station, Laloki (near Port Moresby) and are not released until inspected and passed by a plant pathologist.

Departmental introductions included a large number of pasture grass and legume species and selections and varieties of peanut, sunn hemp and rice. Material imported by others and grown at Laloki included forest tree seeds and plants for the Botanical Gardens, Lae, on behalf of the Department of Forests.

#### *Quarantine Inspection Service*

The Quarantine Inspection Section carried out both plant and animal quarantine inspection work. Headquarters and training centre are in Port Moresby and 14 full-time Quarantine Officers are stationed at ports of entry in Papua New Guinea.

Officers at all main ports inspect all overseas aircraft and ships on arrival and also inspect parcels arriving by mail. Many undesirable introductions have been intercepted.

#### *Agricultural Extension*

To achieve the aims of agricultural extension work, which have been stated in detail in earlier reports, the department draws up extension programmes based on the particular needs, opportunities and problems of each district. Due regard is paid to the principle that, to be effective, changes must be introduced gradually and must be accepted voluntarily by the people. The programmes, which are constantly reviewed and adjusted to meet changing circumstances, are concerned not only with increasing and diversifying production, but with preserving resources by sound conservational methods. The present levels of social and educational advancement of the Papua New Guinean farming community make it difficult to interest them in land use procedures as rational systems, or to create an awareness of a Papua New Guinea-wide need for the conservation of agricultural resources. For some years, therefore, the Papua New Guinea Government must continue to accept complete responsibility for this aspect of development, but meanwhile consultation with the people is bringing about some understanding of the importance of conservational methods and their local application.

The extension activities of the department may be broadly grouped under the heading of contact, demonstration and training, and take the following forms:

- (i) contact with the farming community is made and maintained in various ways—through field days, agricultural patrolling and village visiting, the development of agricultural extension centres and rural organisations of various kinds, the provision of marketing facilities and advice on the provision of implements and machinery, or through the activities of trained intermediaries; land development schemes aimed at providing improved opportunities for progressive farmers make possible a special type of contact; such extension aids as films, film strips, photographic and poster displays, pamphlets and recorded talks are primarily a means of support for contact procedures, although they also have an important function in training programmes;
- (ii) demonstration work involves both field activity in the form of demonstrations on

the farmer's own land or crops, and the provision of demonstrations on agricultural extension stations; and

(iii) training activities, take place at three levels:

(a) higher training aimed at producing a local supply of professional and semi-professional agriculturists for the future;

(b) training of Papua New Guinean intermediaries to assist in agricultural extension programmes; and

(c) training of farmers themselves to meet the problems that farmers face in developing rural communities.

Specialised sections dealing with agricultural training, crop processing and marketing, and mechanisational services for cultivation and processing equipment, have been set up. The establishment of the Education and Training Branch which includes teaching staff for existing and proposed higher level training institutions and for the supervision of in-service and field training curricula has given new impetus to this important work of agricultural training. The Marketing Section within the Rural Economics and Commodity Research Branch, which includes a produce inspection service, provides assistance and arranges sales at best possible prices for organisations such as rural progress societies. In addition, it arranges outlets for the disposal of all crops purchased by the Government from local farmers. Project managers supervise major processing and marketing projects for Papua New Guinean farmers in field areas. A close relationship between the extension and marketing functions is considered to be especially important at the present stage of farming development.

Intensive agricultural extension work is continuing, the main policy objectives being as follows:

(i) raise farm incomes and increase rural living standards;

(ii) increase Papua New Guinean participation and accelerate the movement of indigenes from subsistence to commercial production;

(iii) provide avenues of self-employment and expanded wage and employment in commercial production;

(iv) expand local food production for subsistence and sale, to reduce the demand for imports, improve the diet, and keep food prices at a reasonable level;

(v) encourage adoption of sound agricultural practices, both to improve productivity and to ensure the best use of agricultural resources; and

(vi) increase production and exports in order to improve Papua New Guinea's balance of payments and to the greatest extent possible advance the movement towards a more diversified and viable economy.

*Agricultural Training.* Approved training courses are as follows:

(i) a full agricultural diploma course with Form IV entry standard. This course is offered at Vudal Agricultural College near Keravat, East New Britain District. The college commenced in 1965 and the first diplomates graduated in December 1967.

(ii) a 2-year sub-diploma certificate course including both theoretical and practical instruction in agriculture, botany, pests and diseases, agricultural economics, farming mathematics and English expression. This course is conducted at the Popondetta Agricultural Training Institute.

(iii) farmer training courses of variable duration according to local needs, at various agricultural extension stations and centres.

*Agricultural Extension Centres.* These small establishments serve as local bases at the sub-district or area level for such field extension activities as patrolling, field training and the distribution of seed and planting material. It is policy to expand the services available to farmers by developing additional extension centres.

*Development of Major Programmes of Rural Organisation and Marketing.* To cater for the considerable expansion of commercial production by traditional farmers throughout Papua New Guinea, a series of major marketing projects has been organised on an area basis in various districts. These area marketing projects are under the control of marketing sections within the Field Operations Division. The projects are integrated with the work of rural organisations, such as rural progress societies, co-operative societies, and local government councils, and allow the development of individual enterprise within their framework.

Other aspects of rural organisations and marketing are:

(i) *Rural Progress Societies.* These continue to play an important part in the economic advancement of the people in that

they provide organised groupings into financial societies which can cater for the purchase and disposal of cash crops grown in the area.

(ii) *Co-operative Societies.* An early activity of these societies in relation to primary production was copra marketing. More recently societies have been formed to engage in coffee and cocoa processing and marketing. Continued assistance has been provided in the form of training and advice in all areas of Papua New Guinea where they operate.

(iii) *Local Government Organisations.* The Division of Field Operations continued to maintain close liaison with local government councils on matters affecting rural economic development.

(iv) *Direct Purchase of Cash Crops.* In areas where marketing facilities are either non-existent or ineffective, direct assistance was given to Papua New Guinean producers through the purchase of their crops by extension officers. During 1971-72 crops purchased in this way included cocoa, coffee, rice, pyrethrum, tea, tobacco, chillies, passionfruit, vegetables and marine products. This service provided a particular stimulus to producers in isolated and underdeveloped areas.

*Smallholder Projects.* The aim of these projects, a series of which is being established in suitable localities, is to give advanced farmers an opportunity to develop individual holdings under secure conditions of tenure, and at the same time demonstrate to other farmers in tribal areas the advantage of individual tenure.

Smallholder projects at present in operation include Papua New Guinea Government projects, under which Administration land is sub-divided and leased to indigenous agriculturists, and land tenure conversion projects, under which tenure of customarily owned land which has been sub-divided and allocated by the group, is converted under the Land Tenure Conversion Ordinance to individual registered titles in fee simple. A third type, local government projects, under which Administration land was leased to a local government control, sub-divided and sub-leased to members of the council, has been discontinued.

Settlers continued to make good progress with the development of their blocks under the guidance of full-time agricultural extension staff.

*Operation of Mechanisation Services.* Services to rural producers in regard to both cultivation and processing equipment were maintained by mechanical equipment officers located at Goroka (Eastern Highlands District) serving the Highlands region and Lae (Morobe District) serving the Morobe and Madang Districts, and Rabaul (East New Britain). Regional services are provided from Rabaul for the islands lying to the north of New Guinea and Port Moresby for the Papuan Region. A mechanic and workshop staff are stationed at Baiyik Agricultural Station and Wewak in the East Sepik District serving the East and West Sepik Districts. The department operates rice processing mills at Baiyik and Bereina. Papua New Guinean apprentices have been assigned to each area workshop and are being trained to repair and maintain processing and cultivation equipment. Several short courses in tractor operation were given for mechanics, apprentices and machinery operators during the year.

*Produce Inspection Service.* Copra and cocoa for export is inspected at Lae, Madang, Lorengau, Kavieng, Rabaul, Port Moresby, Samurui, Kieta and Wewak.

*Central Processing Facilities.* The operation of the processing facilities mentioned in previous annual reports was continued; these included rice-milling centres at Baiyik and Bereina. Tobacco drying and grading facilities have been established at Goroka.

#### *Papua New Guinean Participation in Agricultural Administration*

Consultation is maintained through such organisations as co-operative and rural progress societies and local government councils, and with political representatives. Papua New Guinean participation in the administration of the agricultural programmes is being increased through the employment of Papua New Guineans as research and extension assistants in the Department of Agriculture, Stock and Fisheries, while one of the main aims of the higher level training referred to above is to produce qualified indigenous officers who can be recruited to more senior positions in the department.

#### *Adequacy of Food Supplies*

Parts of Papua New Guinea are occasionally subject of famine, as in highland areas, when relatively dry weather conditions are exacerbated by frost, but the most important aspect of nutritional improvement is to

increase the supply of protein in communities where the diet is deficient in it. The Department of Agriculture, Stock and Fisheries, assisted by other departments of the Government, maintains an active programme designed to raise the level and improve the quality of food production in traditional agriculture.

Special food production problems and the corrective action being taken have been described above in the section on *Traditional Cultivation Methods and Techniques*.

#### *Control of Production*

Papua New Guinean farmers are not subject to any kind of discriminatory compulsion or restriction in regard to crop production. There is power under the Native Administration Regulations to compel the planting and cultivation of crops in an area declared to be liable to famine or scarcity, but in practice recourse to compulsion is not necessary. In the case of rural industries where overall provision or regulations aimed at the control of plant and animal disease exist, Papua New Guineans are required to observe the same measures as other producers, e.g. the registration of cacao trees, animal disease control measures (particularly in relation to pigs) and internal quarantine measures restricting the distribution of seed and planting material. There are no measures of the latter type applicable especially to indigenous producers.

Although no special measures of compulsion exist, Papua New Guinean farmers are influenced, as far as possible, not to engage in industries which are unsuited, for environmental or other reasons, to the areas which they occupy. The specific district agricultural development programmes for farmers, referred to above, are aimed at minimising unsatisfactory developments of this nature.

#### *Rural Economic Research*

The Rural Economics and Commodity Marketing Branch of the Department of Agriculture, Stock and Fisheries now consists of 14 economists. Regional agricultural economists have been stationed in Lae and Goroka.

Continuing downward pressure on the world prices of tropical crops and increasing rural wages accompanying economic development have involved the branch in a comprehensive programme of research into the economics of the major export crops, with the aim of improving economic efficiency and streamlining marketing procedures.

The branch is concerned with:

- (i) national, regional and project development planning in rural industries;
- (ii) feasibility studies and investment analyses;
- (iii) farm management studies of both Papua New Guinean and expatriate primary enterprises;
- (iv) marketing studies, including planning for the establishment and improvement of local marketing organisations and facilities, and assessment of world and domestic markets for existing and potential crops;
- (v) collection and analysis of rural production data and the estimation of likely supply and demand;
- (vi) *ad hoc* studies involving examination of rural credit, production, processing, transportation and prices; and
- (vii) provision of farm management training services.

Specific economic studies have been undertaken on various aspects of the pig, poultry, cattle, peanut, pyrethrum, tobacco, rubber, tea, rice, coconut, cocoa and spice industries. An application for international finance for smallholder livestock has been prepared. Analysis of the economics of freshwater, inshore and deep-sea fisheries and fish processing have been carried out. Studies of the special problems of supplying and marketing locally-produced rice and other fresh food-stuffs to Port Moresby, Bougainville and other centres have been made. The success of a number of land settlement schemes has been assessed.

## CHAPTER 4 LIVESTOCK

### *Administrative Organisation*

The Division of Animal Industry of the Department of Agriculture, Stock and Fisheries is responsible for carrying out all those activities of the Government which directly affect the animal industry. The Division provides the following services:

- (i) quarantine;
- (ii) clinical and advisory veterinary services;
- (iii) planning and conducting programmes for the control and eradication of diseases and pests;
- (iv) animal production research;
- (v) animal husbandry advisory services;
- (vi) operation of abattoirs; and
- (vii) operation of livestock stations.

Stations have been established for breeding livestock for distribution, demonstrating proven methods of station management and animal husbandry, and for experimental work in pasture improvement and animal production and performance.

The following centres and stations were in operation throughout the year under review:

The Tropical Pig Breeding and Research Centre (formerly Animal Industry Centre), Goroka; Animal Industry Centre, Kurakaul, Rabaul; Animal Industry Centre, Lae (a quarantine and introduction centre, regional store and base for Division activities in the Region and District); Animal Industry Centre, Madang (a quarantine centre); Eastern Highlands Livestock Station, Bena Bena; New Guinea Lowlands Livestock Station, Erap, Morobe District; Sepik Plains Livestock Station, Urimo; Western Highlands Livestock Station, Baiyer River; Central Abattoir, Lae; Goroka Abattoir, Kamaliki, Goroka; Mount Hagen Abattoir, Korn Farm, Mount Hagen; Madang Abattoir, Madang; Moitaka, near Port Moresby; the Papuan Lowland Livestock Station, Bisianumu; Central District and the Kila Kila Quarantine Station, near Port Moresby. In addition, high grade Brahman and Brahman cross cattle are sold from the Papuan Lowlands Livestock Station, Moitaka to cattle owners throughout Papua New Guinea.

The work of these centres and stations is supported by a laboratory at Port Moresby which is equipped to handle all aspects of bacteriology, parasitology, and pathology.

#### *Principal Types of Stock*

The principal types of livestock are pigs and poultry (owned mainly by the Papua New Guineans) and cattle. Donkeys, goats, sheep and horses are also kept.

*Pigs.* In most areas the pig population is quite large, particularly in the Highlands. The pig is not a native Papua New Guinea, but probably accompanied early population movements from Asia and the islands to the north; however, it seems more closely related to the European type of pig, *Sus Scrofa*, than to the types of pigs found in Malaysia or other South-East Asian countries. It has been named a separate species, *Sus papuensis*.

Two types of pig husbandry are practised—open range grazing, in which breeding and management in general are but loosely controlled, and semi-intensive, in which pigs sometimes share the same dwellings as their

owners. As the pig is regarded primarily as an indication of wealth and is used mainly for ceremonial purposes, pig meat contributes little to the diet of the people.

Efforts to improve the quality of local pigs include the breeding of pigs at the Tropical Pig Breeding and Research Centre at Goroka, and the New Guinea Lowlands Livestock Station, Erap, for distribution to villagers. During the year 938 pigs were distributed from these piggeries, most of them being sold to the Papua New Guineans at an average price of \$25 each. Centres have been established at several places in the highlands districts where villagers may bring their sows to be mated with pure-bred boars at a nominal charge.

A special pig crossbreeding project has commenced at all piggeries, and stock from the breeding programme is checked in this village environment. Native pigs have been obtained from several areas, and are used in the crossbreeding with imported pigs to determine the type most suited to village husbandry.

A specialist pig production officer is stationed at Goroka in the Eastern Highlands District. This officer is engaged in research work, aimed at improving village pig husbandry. Thirty-two pigs were imported during the year 1971-72.

*Cattle.* Cattle were imported into Papua New Guinea from the last decade of the nineteenth century until the 1939-45 war to work on plantations and to provide fresh meat for plantation personnel. The gradual establishment of the commercial pastoral industry in more recent years has reduced the importance of this subsidiary form of cattle raising.

The quality of the cattle is, in the main good. Cattle number 102,616 head—a 10 per cent increase on the previous year. Locally-killed beef provides only part of Papua New Guinea's beef requirements, and there is also scope for the expansion of production of milk and dairy products.

The importation of cattle from Australia is encouraged by granting subsidies to reduce the cost of transporting animals of above average quality to Papua New Guinea. During the year 1971-72, 843 cattle were imported for private graziers and were mainly Brahman crossbred animals. All were imported under the cattle freight subsidy scheme.

An increasing number of locally bred female stock is now being sold by private pastoral companies to indigenous farmers, either at



auction or through private sales arranged by field officers of the department. Some 1,600 cattle were sold in this way during the year.

The centres and stations take part in the animal breeding and production projects operated by the Division of Animal Industry.

These projects are:

(i) *Dairy Cattle Project.*

This project has been transferred from Kurakaul to Moitaka and is utilising Jersey, Jersey-Sindhi and Jersey-Sahiwal crossbred cattle. Selection is based on production per lactation in the first calf heifers.

(ii) *Beef Cattle Project.*

This project is in two sections relative to the breed of tropically adapted cattle that is used as the base of the crossbreeding.

(a) *Brahman crossbreeding project.* The Brahman stud is situated at the Papuan Lowlands Livestock Station, Moitaka. The major cross-breeding project is at Moitaka and bulls have been sold from there to almost every district. Other Brahman crossbreeding projects are in operation at New Guinea Lowlands Livestock Station, Erap, Western Highlands Livestock Station, Baiyer River, and Sepik Plains Livestock Station, Urimo, based mainly on imported Droughtmaster (Brahman-Shorthorn crossbred) cattle from Australia. Moitaka bulls are being used on all these stations.

(b) *Africander crossbreeding project.* This project is carried out on the New Guinea Lowlands Livestock Station, Erap, and the Western Highlands Livestock Station, Baiyer River, from Africander bulls imported from Australia. Shorthorn and Red Poll females are used as the other part of the cross.

(c) A specialist livestock officer (artificial breeding) works from Goroka in the Eastern Highlands. The artificial breeding scheme will operate amongst the Papua New Guinean owned cattle of the Eastern Highlands and Chimbu Districts where there is a relatively high density of cattle services by an adequate road system.

Performance testing and selection based on the results plays an important part in improving performance on all the stations. Bulls and store cattle are made available at public auctions while heifers and young steers are sold to village cattle projects. A total of 1,600

head was sold during the year. Further information on cattle holdings is given in Appendix IX.

#### *Other Livestock*

*Horses.* Horses are kept at the New Guinea Lowlands Livestock Station, Erap, at the Western Highlands Livestock Station, Baiyer River and at the Sepik Plains Livestock Station, Urimo.

A few horses are also held at the centres at Goroka and Rabaul. The Papua New Guinea Government, in order to improve the quality of stock horses used in the pastoral industry, imports thoroughbred stallions; private horse owners can pay a service fee and have selected mares mated to these stallions. The freight subsidy scheme has been extended to encourage the private importation of stud and above average breeding horses.

*Poultry.* During the year, 114,432 day-old chickens were imported mainly for commercial poultry farmers located near the larger towns.

A special poultry breeding project is in operation at the Animal Industry Centre, Lae. The female breeding stock was imported from Australia while much of the male stock has been collected from village areas. Crossbreeding is carried out to develop a bird which performs adequately under village husbandry conditions. In addition, local feeds are incorporated in poultry rations, and research is carried out into management systems capable of making the best use of these resources. Day-old chickens from this centre are forwarded to Animal Industry Centres at Goroka and Rabaul for rearing prior to sale to Papua New Guinean farmers at 8 weeks of age. Six thousand nine hundred and seventy-five birds were distributed through these centres during the year.

#### *Control of Pests and Diseases*

To minimise the risk of pests and diseases spreading, the Papua New Guinea Government maintains a strict control over the movement of stock.

The vaccination of pigs against anthrax in the Highlands and in the Sepik District continued. The Australian vaccines used have proved to be effective in preventing the disease and in containing outbreaks.

Brucellosis is present in only 3 herds. During the year 50,174 sera were tested for

bovine brucellosis. The incidence of brucellosis during the past five years has been as follows:

| Year      | Number tested | Reactors | Per cent |
|-----------|---------------|----------|----------|
| 1967-68.. | 30,023        | 295      | 1.76     |
| 1968-69.. | 69,221        | 213      | 0.31     |
| 1969-70.. | 44,590        | 201      | 0.14     |
| 1970-71.. | 45,026        | 311      | 0.69     |
| 1971-72.. | 50,174        | 5        | 0.01     |

Only 3 herds remain in quarantine for brucellosis. No reactors have been detected for over 9 months and it is expected that all herds will be out of quarantine by mid-1973 when a large turn-off of cattle into the village cattle industry of the highlands district will again be possible.

Cattle tick has been eradicated from most of Papua New Guinea. The only remaining infested areas are in New Ireland, south of Namatanai and around Port Moresby and Sogeri. Eradication has been commenced.

The incidence of screw-worm fly strike has been greatly reduced by the use of insecticides to control the fly.

Most cattle in the major cattle-raising areas have been tested for tuberculosis. There were no reactors in cattle testing during 1971-72.

The veterinary laboratory at Port Moresby provides diagnoses on specimens forwarded from all parts of Papua New Guinea.

#### Marketing

The Government's central abattoir at Lae provided cattle and pig slaughtering facilities for producers in the Markham and Ramu Valleys and the Bulolo-Wau area, while similar facilities for the Papuan lowlands were provided by the Government abattoir at Tiaba near Port Moresby.

Rural abattoirs have been constructed at Goroka, Mt Hagen, Wewak and Madang. Another rural abattoir is nearing completion at Popondetta, while construction of a sixth at Rabaul will begin in January 1973.

A Local Government Council abattoir at Tapini is expected to be in operation early in 1973.

Six private slaughter floors are licensed under the Slaughtering Ordinance, and throughput is monitored by meat inspectors.

The Division of Animal Industry is responsible for the inspection of fish products being

exported. During 1971-72 exports of tuna, barramundi and crayfish declined due mainly to adverse weather conditions. Exports of prawns continued to increase. The exports of fish for the past 2 years are shown in the table below:

#### EXPORTS OF FISHERIES PRODUCTS

|                  | 1970-71    | 1971-72   |
|------------------|------------|-----------|
|                  | lb         | lb        |
| Barramundi .. .. | 211,032    | 164,091   |
| Tuna .. .. .     | 34,167,839 | 9,237,654 |
| Crayfish .. .. . | 47,198     | 32,720    |
| Prawns .. .. .   | 1,338,170  | 1,492,057 |

#### Dairying

Dairy farming with high standards of hygiene and management is well established in areas near the main towns where there are ready markets for milk and other dairy products. The area of land close to towns which is suitable for dairy farming is limited. With increasing numbers of Papua New Guinea consumers becoming aware of the advantages of using animal protein, particularly milk protein, for older children, the further development of the dairy industry would appear to depend solely upon the availability of suitable land in the less settled areas and upon whether the problems of marketing and transporting dairy products from such areas can be solved.

#### Pasture Improvement

Pasture and range management research is carried out on animal industry stations by Animal Production officers, in conjunction with pasture agronomists of the Division of Research and Surveys.

Many species have been planted in trial plots to observe their production. The grasses which have shown most promise to date are Guinea grass (*Panicum maximum*), elephant grass (*Pennisetum purpureum*), para grass (*Brachiaria mutica*), and *Setaria* spp. These have been planted in mixed pastures with the tropical legumes *Centrosema pubescens*, *Stylosanthes guyanensis*, and *Phaseolus atropurpureus*.

In most areas natural grasslands can be improved through careful management and the introduction of tropical legumes.

#### Land Availability

The traditional form of land ownership places some restriction on the development of the livestock industry as it does on other forms

of agriculture. However, unlike arable land where individual usage rights often apply, open grassland is in the main available to all members of the group or clan. Papua New Guinean-owned cattle farms are generally operated on communally owned land, although a number of farmers now have leases of up to 700 acres. In 1971-72, 689 agricultural leases were granted covering a total area of approximately 14,967 hectares.

#### *Extension Activity*

Steady progress is being made in the training of local people in stock management, and Papua New Guinean stockmen are employed on Government livestock stations.

The Senior Veterinary Officer (Training) conducts in-service training courses in disease control, meat inspection and animal production. He also supervises the farmer training centres at Baiyer River, Urimo, and Erap, where courses in cattle husbandry are given.

The Vudal Agricultural College and the Popondetta Agricultural Training Institute both carry livestock and provide courses in animal husbandry. As part of the agricultural syllabus the Senior Veterinary Officer (Training) assists in these courses. A herd of three-quarter Brahman heifers and a purebred bull is established at Vudal.

Papua New Guinean stockmen and herdsmen on Government livestock stations are being encouraged to undertake their own grazing properties as these become available.

## CHAPTER 5 FISHERIES

### *Ministerial Responsibility*

As described at the beginning of the Agricultural Products Section of Chapter 3 of this Section and Part, the Minister for Agriculture Stock and Fisheries had responsibility in the year under review, for all aspects of fisheries—except certain aspects of the administration of the Australian Fisheries Act and the Continental Shelf (Living Natural Resources) Act applicable to Papua New Guinea, which were retained by the Administering Authority.

### *Administrative Organisation*

The Department of Agriculture, Stock and Fisheries is responsible for the administration of fishing activities. Following recent departmental organisational changes, there are 2 Fisheries Branches, one in the Research and Survey's Division, and the other in the Division of Development and Marketing.

### *Legislation*

Relevant legislation is contained in New Guinea *Fisheries Ordinance* 1922-38, *Papuan Pearl, Pearl Shell, Bêche de Mer Ordinance* 1911-34, the *Fisheries (Licensing) Ordinance* 1966, the *Commonwealth Fisheries Act* 1952-59, and the *Commonwealth Pearl Fisheries Act* 1952-53.

In 1970 the *Fisheries (Licensing) Ordinance* 1966 was amended to include provision for the licensing of processing ships to allow for modern development within the industry.

In addition in 1970 the *Commonwealth Continental Shelf (Living Natural Resources) Act* 1968 came into force to protect sedentary organisms so proclaimed.

The export of fish and fish products is controlled under the *Customs Ordinance* 1951-59 and the *Commerce (Trade Descriptions) Act* 1952, and the Export (Fish) Regulations of 1953. Fish handling and processing is provided for under the *Pure Foods Ordinance* 1952-57 with regulations.

### *Fisheries Technology Extension*

This is steadily increasing with the availability of more trained staff and the opening of more fisheries stations. In particular the provision of more cold stores and transport has increased the output of fish substantially.

The fisheries station at Madang, now designated the Fisheries Training Centre for Papua New Guinea, has facilities for the upgrading of officers and intakes from agricultural establishments whose graduates select fisheries work. At all fisheries stations fisherman trainees are accepted to work with the staff and learn modern techniques before returning to their villages. Fishing groups are encouraged and these are growing in number and effectiveness. Patrols are undertaken to distant villages.

Where normal retail outlets do not provide nets and gear, the department supplies such items on request.

Individuals and groups are encouraged to own cold stores and ice boxes and a gradual awareness of the necessity for these is being shown.

Boat building in modern style is gradually increasing as currently used canoe designs are limited in fisheries application. Ferro-cement and other products have already been accepted and more are being built.

### Larger Business Ventures

Of the original 5 companies which entered the Papua New Guinean prawning field in 1969, 3 still operate in 1972. As catches were moderate, further local expansion is unlikely but international high seas prawning may remain. During 1971-72 3 Papua New Guinea-Japanese joint venture companies signed long term tuna fishing and processing agreements with the Papua New Guinea Government and an American owned Papua New Guinean fishing company signed a one year tuna survey agreement.

### Traditional Fisheries

Pearl, pearl shell, green snail and bêche-de-mer continue to be eclipsed by synthetic products. The fisheries are moribund and only bêche-de-mer was exported in small quantities from Milne Bay District. An increasing weight of trochus was exported via Lae. Subsistence fisheries, however, show a marked improvement due to modern technology. Unfortunately, statistics on these are difficult to obtain owing to the remoteness of many villages and the fact that indigenous persons are not required to be licensed to take fish for sale. Thus, small business ventures are often present without records being returnable to the Department of Agriculture, Stock and Fisheries.

### Fisheries Research

Fisheries research in Papua New Guinea is aimed at the location and estimation of fish stocks and aquatic resources with a view to development, management and utilisation.

Catch returns from all major fishing companies are collated. Specifically, researchers are studying the biology, distribution and abundance of tropical spiny lobsters, barramundi and associated fluvial species, tuna and other pelagic fishes, prawns, reef, inshore and estuarine fishes and certain molluscs.

*Tropical Spiny Lobsters.* Six palanurid species have been recorded from Papua New Guinea waters. Commercial exploitation of tropical spiny lobsters in Papua New Guinea has centred around the 'ornate spiny lobster' *Panulirus ornatus*, this species being fished at Yule Island and Daru. Research into the biology of this species is continuing, current research being directed towards identifying the cause and extent of the annual migration. No other stocks of tropical spiny lobster of commercial interest have been found.

*Barramundi.* The Barramundi (*Lates calcarifer*) is rapidly becoming a major primary industry in the Western District. Up to 250 tons are exported annually, while a similar quantity is consumed locally. Biological investigations into the increasing commercial potential of this species and other estuarine species is continuing. An intensive tagging programme on barramundi was commenced in mid-1970 and a population analysis programme well established. Over 6,000 fish have been tagged to date with 800 recaptures. A pond breeding study using barramundi has commenced in association with research on other estuarine species.

*Tuna.* Results of commercial exploitation of Skipjack and Yellowfin tuna taken in Papua New Guinea waters indicate a promising future for this newly developed industry. Commencing late 1970-early 1971, three Japanese companies partook in commercial tuna exploitation, operating from Rabaul, Kavieng and Madang. Nearly 17,000 tons of tuna were caught in the calendar year 1971.

Three biologists plus support staff have been assigned to assess the nature and extent of the New Guinea tuna resource and to investigate the possibilities of developing a tuna bait fishery. A large-scale tagging programme has commenced.

*Prawns.* Commercial exploitation has continued. No important new grounds have been located. The main species caught is Banana prawn (*Penaeus merguinsis*) together with Giant Tiger prawn (*P. monodon*). Small quantities of several other species were also taken, although of no great commercial interest.

*Crown-of-Thorns Starfish.* Surveys designed at determining the distribution and concentration of the Crown-of-Thorns Starfish, *Acanthaster planci*, on the extensive coral reefs surrounding Papua New Guinea were commenced in May 1970. These surveys have recently been introduced into the biology curriculum of Papua New Guinea secondary schools.

Results of these surveys to date indicate that no serious threat exists; however, the starfish are being kept under surveillance.

*Fisheries Surveys.* In addition the Fisheries Research and Survey Section has conducted numerous local surveys in specific areas, to assess the current utilisation of the resource and potential future expansion.

**Pearl Shell.** The presence of a large pearl farm at Port Moresby which imports its shell (*Pinctada maxima*) from Western Australia, has led to the appointment in 1972 of a biologist to study the availability of local pearl shell and the prospects for its culture. *Pinctada maxima* (gold-lip) occurs in isolated beds in deep waters around the coast, while *P. Margaritifera* (black-lip) is more common on shallow reefs, though never in 'beds'. Both species are valuable for pearl and half-pearl production as well as for the shells themselves, which still find international market outlets. The nature of the pearl shell populations in Papua New Guinea waters is such that some form of culture is desirable to obtain a steady supply. Research is consequently aimed at forms of spat collection and artificial fertilisation to secure young pearl shell, which can then be farmed until of suitable size for harvesting or pearl production.

**Freshwater Research.** Freshwater research has, in the main been concerned with ecological investigations of water bodies and feasibility studies on pond culture. Ecological investigations have included the distribution and taxonomy of freshwater fishes, the effects of introduced fish on native fish species, and a description of the biological, physical and chemical characters of inland waters.

Research on methods and species suitable for pond culture has been conducted, mainly the common carp, and distribution throughout the Highlands of Papua New Guinea for pond cultivation has taken place.

#### *Fisheries Resources*

Papua New Guinea waters contain a great variety of fish species. Over 1,100 species are listed in a recent *Handbook of New Guinea Fishes*, but probably more than twice that number will be discovered. In addition, it is estimated that there are about five thousand species of molluscs, and probably an equal number of crustacean forms besides several other aquatic groups of greater or lesser commercial significance.

Relatively few of these are of economic importance. Only a small number are harmful to man or the economy.

In highland waters there are but few native species, in lowlands rivers, lakes and swamps several commercial species—barramundi, snapper, mullet, threadfin, catfish and eels occur. In shallow coastal areas there are prawns of commercial importance. Oysters occur naturally in most mangrove areas.

On shallow reefs parrot-fishes, wrasses, surgeon-fishes, trigger-fishes and many others are plentiful. Other commercial groups from the same zone are spiny lobsters, bêche-de-mer, and various shellfish which are taken for food as well as for the tourist industry and shell trade. On deeper reefs the most favoured species are snappers reefcod, coral trout and sweetlips.

Coastal pelagic species, taken mainly by trolling, include Spanish mackerel, sea pike, tuna, dolphinfish and some billfish. In deeper waters, long-line methods capture larger tunas, marlins and sharks.

#### *Rural Economic Research*

The Rural Economics and Commodity Marketing Branch of the Department of Agriculture, Stock and Fisheries now consists of 14 economists. Regional agricultural economists have been stationed in Lae and Goroka.

Continuing downward pressure on the world prices of tropical crops and increasing rural wages accompanying economic development have involved the branch in a comprehensive programme of research into the economics of the major export crops, with the aim of improving economic efficiency and streamlining marketing procedures.

The branch is concerned with:

- (i) national, regional and project development planning in rural industries;
- (ii) feasibility studies and investment analyses;
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- (iv) marketing studies, including planning for the establishment and improvement of local marketing organisations and facilities, and assessment of world and domestic markets for existing and potential crops;
- (v) collection and analysis of rural production data and the estimation of likely supply and demand;
- (vi) *ad hoc* studies involving examination of rural credit, production, processing, transportation and prices; and
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smallholder livestock has been prepared. Analysis of the economics of freshwater, inshore and deep-sea fisheries and fish processing have been carried out. Studies of the special problems of supplying and marketing locally-produced rice and other fresh food-stuffs to Port Moresby, Bougainville and other centres have been made. The success of a number of land settlement schemes has been assessed.

## CHAPTER 6 FORESTS

### *Ministerial Responsibility*

During the year under review the Papua New Guinea Ministry exercised full authority and final responsibility in relation to the assessment of resources; training, sawmilling regulations; afforestation; the botanical gardens and herbarium; and research and technical service functions of the Department of Forests. The Administering Authority retained responsibility for licensing of timber operations, especially for major projects, although of course this responsibility was exercised under close consultation with the Papua New Guinea Ministry. The Administering Authority also retained responsibility for tertiary aspects of forestry training.

In the Second House of Assembly the Assistant Ministerial Member responsible for Forests was Mr Siwi Kurondo, M.H.A. In the Third House of Assembly, the Minister for Forests is Mr Sasakila Moses, M.H.A.

### *General*

Forests cover more than 70 per cent of the total area of Papua New Guinea and vary in type from the swamp and lowland forests of the coastal plain to alpine vegetation and moss forests. The lowland forests contain most of the readily accessible millable timber. Although there are large areas of good forests in mid-montane regions between 450 metres and 2100 metres altitude, access to this timber is difficult except in the Bulolo Valley which is connected by a good road to the port of Lae.

Generally the coastal forests are very complex in structure; however, in some areas a predominance of certain species can be found, such as *Intsia* (*Kwila*), *Pometia*, *Anisoptera polyandra*, *Eucalyptus deglupta* and *terminalia*.

### *Legislation*

Forestry legislation consists of the *Forestry Ordinance 1936-1971* and *Forestry Regulations (New Guinea)* and that adopted by the *Forestry (Papua) Ordinance 1951* and the *Forestry (Papua) Ordinance 1962*.

Legislation provides for the protection and management of forest timber reserves and forest produce, acquisition of land and timber rights, the issue of timber permits and licences, control of exports and the collection of fees and royalties. Control of forestry diseases and pests is provided for under quarantine legislation.

The following amendments to the legislation were made during the year.

### *Forestry (Amendment) Ordinance 1971*

An Ordinance was passed by the House of Assembly in June 1971, amending sections of the *Forestry Ordinance 1936-1962*, dealing with the ownership of land over which timber rights have been purchased and with details of timber rights purchase procedures.

The Ordinance:

- makes it clear that the land involved in timber rights purchases remains the property of the owners;
- provides for flow on of payments where timber is harvested in excess of the original purchase;
- requires the Government to provide full information to owners on permits in a purchase area;
- provides that land for buildings etc. required for harvesting or processing timber be subject to the normal lease or purchase procedures.

### *Forestry (Private Dealings) Ordinance 1971*

A private Members ordinance, the *Forestry (Private Dealings) Ordinance* was accepted in the House of Assembly.

The ordinance enables the owners of timber to dispose of their timber to any person, and contains safeguards to protect the interests of the owners and the nation in such sales.

Under the provision of the *Forestry Ordinance*, the Department of Forests controls land purchased by the Government for the following purposes:

- (i) territorial forests—dedicated and declared for perpetual management.

(ii) land purchased for forestry purposes, but for various reasons not yet classified or dedicated as a territorial forest.

(iii) land purchased for non-forestry purposes such as agriculture, but which is under forest (removal of timber from such land is regulated by means of timber permits and licences).

The Department of Forests administers the provisions of the Forestry Ordinance over land for which timber rights have been purchased. The purchase of timber rights allows controlled timber removal. The land over which timber rights only have been purchased remains the property of the owners.

The conditions under which land may be acquired by the Government for forestry and other purposes are described in Chapter 3 (a) of Section 4 of this part.

#### *Policy*

In accordance with policy, the Department of Forests manages the forest resources in Papua New Guinea in respect of the following:

- (i) protection and conservation of the forest resources;
- (ii) the establishment of a permanent forest estate;
- (iii) experimental activities in the fields of afforestation and silvicultural improvements;
- (iv) reforestation by establishment of new plantations and silvicultural treatment to ensure natural regeneration of harvested forest areas intended to be managed as perpetual forests;
- (v) supervision of sawmilling activities in Papua New Guinea;
- (vi) utilisation research;
- (vii) provision of services of botanical investigation and identification;
- (viii) investigation to demarcate timber stands of economic importance and compilation of detailed working plans for those forests set aside for the protection of timber;
- (ix) the training of Papua New Guinean people in forestry skills to enable them to participate in the management of the permanent forest.

The average population density of Papua New Guinea, estimated to be between 5 and 6 persons per square kilometre, is comparatively low and consequently very large areas of forests are still untouched. Efforts are being

made to direct expansion of the timber industry into areas most likely to be soon brought under cultivation. This will not only ensure profitable use of the timber on such areas, but will also allow other areas to remain untouched until location of permanent reserves has been decided. It will also allow time for the development of satisfactory silvicultural techniques for the management of such forests.

Where forest land is more suited to agricultural development than to permanent forestry, only timber rights may be acquired if the agricultural development is to be carried out by Papua New Guinean owners. In such cases the granting of timber concessions ensure that the timber is used and not wasted in land clearing operations.

Permits and Licences at 30 June 1972: There were 59 permits covering 524,375 hectares and 39 licences covering 55,341 hectares.

#### *Attitude of the People of Papua New Guinea*

There is an increasing awareness amongst the people of the potential of their natural timber stands for harvesting. Increasing attention is being given to the need to involve the local inhabitants in the development of their timber stands. Indigenous equity holding in timber companies has begun; additionally, legislation has been passed enabling timber owners to negotiate directly with the industry with assistance and advice from the Papua New Guinea Government.

#### *Forest Service*

The forestry policy of Papua New Guinea is administered by the Department of Forests with headquarters in Port Moresby. Papua New Guinea is divided into 5 regions with regional headquarters each under the control of a senior forestry officer, at Port Moresby, Lae, Bulolo, Mount Hagen and Rabaul.

The Division of Botany has its headquarters in Lae, the Forest Products Research and Development Centre is located at Port Moresby, and the Forestry College is situated at Bulolo.

The forest service began with the appointment of two trained foresters in 1938; it was re-established after the war and has gradually been built up by recruitment of qualified staff from Australia and overseas, and by the training of Papua New Guineans through the Forestry College.

Forest stations, research centres and major nurseries are established at Bulolo, Wau and Lae in the Morobe District, Goroka and Lapegu in the Eastern Highlands District, Mount Hagen and Kagamuga in the Western Highlands District, Madang in the Madang District, Kerevat in the East New Britain District, Hoskins in the West New Britain District and Brown River in the Central District.

Papua New Guinea Government forestry officers are permanently stationed at Kavieng, Nantambu, Wewak, Vanimo and Mendi to supervise harvesting of timber stands in those areas and in numerous other localities throughout Papua New Guinea to aid local government councils in raising and planting trees within their council area.

#### *Recruitment and Training*

*Recruitment.* Owing to difficulties encountered in attracting suitable qualified staff, recruitment of professional staff has been below expectation; however, the last year has seen an increase of 37 Papua New Guineans on the salaried staff in technical and administrative fields. Localisation of the department is increasing as rapidly as possible. At 30 June 1972 there were 189 expatriate and 466 Papua New Guinea officers on the salaried staff.

*Training.* The Papua New Guinea Forestry College is situated in the Bulolo Valley at an altitude of some 760 metres above sea level. There are large natural forests of hoop and klinki pine nearby, and the college has ready access to high and low altitude forests at Edie Creek and near Lae respectively; field studies form an important part of the curriculum and students also visit forests in other parts of Papua New Guinea. The forest industries in the Bulolo valley and the Lae are among the most highly developed in Papua New Guinea and studies are made of plywood, veneer and sawmill practices and problems.

The Forestry College is well staffed and equipped for high level academic and practical training. Sub-professional training at three levels is available.

A diploma course in Forestry was commenced at the Papua New Guinea Forestry School in February 1967. This course occupies a 3-year period, in which time the students are given practical training in departmental plantations and natural forests, and industries throughout Papua New Guinea. The successful completion of the course leads

to promotion to grades of Assistant Forest Officer. The course covers four major fields:

- (i) forest biology;
- (ii) forest management;
- (iii) forest economics, policy administration; and
- (iv) wood technology and utilisation.

The college also provides other sub-professional courses at the certificate of forestry level—one a technical course of 2 year duration with a general base in the fields mentioned above, but with specialisation in one of these—and a vocational course of 6 months intensive practical training in narrow spheres such as nursery and plantation supervision.

The college accepts students from the English speaking South Pacific area and pupils from Tonga, Samoa, Fiji, Solomon Islands Protectorate and the Trust Territory of the Pacific Islands are in residence.

A diploma course in cartography is also available at the Forestry College. This 3-year course drew 19 trainees during the 1971 academic year and 22 trainees at commencement of the 1972 academic year. It is noteworthy that the first female cartographic student was enrolled at the college for the 1972 year.

In line with the recommendations of the Commission into Higher Education, negotiations have been completed for the cartographic course to be transferred from the college to the Institute of Technology in Lae.

Enrolments at the Forestry College during 1972 included 2 trainees for the National Parks Board.

*Graduations.* At the completion of the 1971 academic year, the following numbers of students graduated from the College in their respective courses.

- 10 Diploma of Forestry
- 5 Diploma of Cartography
- 14 Certificate of Forestry
- 20 Forestry Assistant

#### *Silviculture*

The rate of silviculture operations is determined by the area of land dedicated to permanent forest and the rate of harvesting of timber on that area. Silvicultural techniques are being developed for application to all areas likely to be brought under permanent management as forests.

Planned reforestation of suitable areas supplemented by natural regeneration is being continued. This involved the replacement of



midmontane *Araucaria* forest with pure stands of *Araucaria cunninghamii* (hoop pine) and *Araucaria hunsteinii* (klinki pine), and of mixed lowland rain forest with *Tectona grandis* (teak) and *Eucalyptus deglupta* (kamarere) forest. Experimental work has indicated that the native *Araucaria* species and several exotic pine and eucalyptus species are promising in the highland grassland areas.

The principal silvicultural activities during the year were at Bulolo and Wau in the Morobe District, Kerevat in the East New Britain District, Mount Hagen in the Western Highlands District and Brown River in the Central District.

Reforestation is taking place on areas from which timbers have been harvested for the plywood manufacturing industry and for local sawmilling. Grassland areas in the highlands are being planted with pinus species and swamp areas of the Western Highlands with eucalyptus species.

Government plantings at 30 June 1972 totalled in excess of 12,100 hectares—details of these plantings may be found at Appendix XI Table 2.

Plantings for the year ended 30 June 1972 were some 300 hectares more than the previous year. The increased planting was mainly centred in Bulolo with 338 hectares of *Araucaria hunsteinii* and 151 hectares of exotic pines planted during the year.

#### Nurseries

Nurseries are maintained at Wau, Bulolo, Goroka, Lapegu, Kagamuga, Kerevat, Hoskins, Baku, Oomsis and Brown River, and in addition numerous small nurseries service village projects and amenity needs. An example of this is the establishment of the major nursery at Kagamuga in the Western Highlands to service a number of smaller outlying nurseries within the district.

During the year, in excess of 3 million seedlings were raised for Government plantation establishments and for distribution to council projects and other interested organisations.

#### Extension

Development and interest in tree planting is being encouraged at village level. With the increased activity in the cattle industry, a strong demand has developed for a variety of species to provide shade, fence posts and living fences; in addition, tree planting in some

districts such as the Western Highlands District is providing a source of firewood for the tea industry and for domestic purposes.

#### Research

Research activities have intensified with the recruitment of 5 additional professional staff primarily for a team study on problems associated with large-scale reforestation in wet tropical lowlands. Research projects covered by the Government utilise silviculturalists, nutritionists, pathologists and entomologists.

#### *Araucaria* Plantations

Underplanting trials of logged rain forests and plantations with *Araucaria hunsteinii* are continuing. Areas of the *Araucaria cunninghamii* plantations have been severely damaged by primary infestation with the branchlet mining scolytid *Hylurdretonus araucariae* and both primary and secondary infestation with *vanapa oberthuri*. Entomological research on protection of these pine plantations continues but, as yet, no effective practical protection measures have been devised.

*Species trials.* Provenance trials continue with *Pinus caribaea*, *P. merkusii*, and *P. kesiya*.

*Genetics.* A better technique for successfully grafting *araucaria hunsteinii* was devised which involves hormone injection of patch grafts, with the stock under shade.

*Seed Orchards.* A seed stand of *Pinus patula* was established with important selected South African and Rhodesian clones.

*Teak Plantations.* Low germination of highly viable teak seed remains a problem, and research into pre-germination treatment continues.

#### *The Forest Products Research and Development Centre*

The establishment and functions of the Forest Products Research and Development Centre, formerly the Forest Products Research Centre, has been covered in a previous report.

The centre, located in Port Moresby, is divided into the following sections:

- (i) Administration Section
- (ii) Wood Preservation and Development Section
- (iii) Pulp and Paper Section
- (iv) Wood Conversion and Utilisation Section
- (v) Minor Forest Products Section

Liaison involving co-operative work is undertaken with the Australian Commonwealth, Scientific and Industrial Research Organisation (CSIRO) Division of Building Research and Applied Chemistry, the Institute of Technology in Lae, and overseas laboratories located in the Philippines, Fiji, Malaysia, Borneo and the United Kingdom.

The utilisation of pressure treated round timbers from plantations has commenced with a commercial plant established by the Government at Banz in the Western Highlands, based on exotic eucalyptus and a pilot study of pressure treated teak thinnings is in progress in Port Moresby. Pressure treated marine wharf piles and associated timber structures are being tested in major wharf structures at Port Moresby and Lae using local timbers. In conjunction with this work, an intensive study of the ecology of marine borers and suitable preservation techniques is under way.

Also under way is a study of Ambrosia beetles with an emphasis on control in log and sawn timber.

Work continued on the establishment of air drying practices tailored for tropical needs with the operation of a laboratory kiln. A full scale forced air drying unit was completed and should give results shortly.

Pulp and paper evaluation of tropical hardwoods mixed to simulate the natural occurrence in major forest types is being undertaken by CSIRO on behalf of and with the assistance of the Forests Products Research and Development Centre.

With the approach of commencement dates of first chip production units in Papua New Guinea, research in this field has increased during the last year, and the installation of a chipping unit is now under way.

Identification of timber samples for industry and research continues to grow and during the last year approximately 4,000 identifications were carried out.

#### *Utilisation*

The history of the utilisation of Papua New Guinea forests has been briefly stated in earlier reports.

Increased utilisation of forest trees, particularly species previously unused, has resulted from the introduction of compulsory preservative treatment of timbers used for government buildings.

Improvements to means of access within Papua New Guinea are bringing more forest areas within economic reach while clearing operations accompanying expanding agricultural development are increasing the supply of timber for the local market and for export.

As a result, the Papua New Guinea population in areas of closer contact, and particularly in the Morobe, East and West New Britain, and East and West Sepik Districts are using more sawn timber in their own building programmes and are taking advantage of the opportunities for employment in the sawmilling and logging activities near their home localities.

The bulk of the plywood produced in Papua New Guinea and an increasing quantity of timber in both log and lumber forms are now exported. This increase is associated with an increase in the number of species which overseas importers are prepared to accept.

Royalties are paid into general revenue, and are not specifically used for the benefit of the forest industry. Nevertheless, as part of the Papua New Guinea Government's policy of balanced development, expenditure on reforestation has been substantial. This is aimed at ensuring a permanent supply of raw materials for the sawmilling industry.

With the development of the Vanimo Timber Area, detailed studies of potential timber species for the second rotation crop—probably plantations of fast growing species such as the indigenous *eucalyptus deglupta*—have begun to ensure continuity of the wood chip export industry in that area.

#### *Harvesting and Marketing*

Log harvest during the financial year 1971-72 totalled 869,660 cubic metres, an increase of 138,700 cubic metres on the previous financial year. The main harvesting activity was centred in the West New Britain District where a large scale export project has been operating. Export trade has recovered after the slight recession experienced during 1970-71.

#### *Sawmills*

Approximately 153,100 cubic metres of sawn timber was produced in Papua New Guinea during the year, of which 24,700 cubic metres was exported. There are at present 88 sawmills operating in Papua New Guinea.

These range from small mission mills servicing their own needs to large commercial

mills with yearly capacities of over 50,000 cubic metres. Of the mills operating during the year, 61 were licenced to use the CSIRO patent dip diffusion method of impregnating sawn timber with preservative salts.

#### *Plywood and Veneers*

Production of plywood remains relatively static although there was a slight increase this year in comparison to the previous 12 months. Plywood of 4.8 mm thickness produced during 1971-72 totalled 3,493,000 sq metres. Metric Conversion: Produced as  $\frac{3}{8}$  in. Plywood and  $\frac{1}{8}$  in. Veneer.

Log intake to veneer mills in Lae and Bulolo for production of 1.6 mm veneer totalled 42,358 cubic metres of which 21,643 cubic metres was conifer and 20,715 cubic metres was non-conifer.

#### *Exports*

The value and quantity of timber products exports from Papua New Guinea for the period under review may be found in Appendix XI, Table 7.

#### *Surveys and Acquisitions*

Forest resource projects included a major logging plan survey over 183,100 hectares in the Open Bay Timber Area of East New Britain of which 15,931 hectares were assessed at an intensity of 3 per cent. Extensive wood sample and pulp wood volume table studies were also carried out in the Open Bay Timber Area to determine the suitability of mixed hardwood species for pulp and paper manufacture.

A major reconnaissance survey over 225,090 hectares of the Kiunga Timber Area in the Western District at 0.05 per cent sample intensity was carried out.

An extensive reconnaissance survey over 145,000 hectares of the Nomad Timber area in the Western District was carried out at 0.01 per cent sample intensity.

#### *Forest Botany*

The Division of Botany has, during 1971-72, become committed to the production of a series of volumes on the plant life of Papua New Guinea. Initially, this project will proceed in close liaison with the botanical section of the CSIRO Division of Land Research, as part of the final stage of the resource survey of Papua New Guinea. Recognition has been given to the impossibility of producing an

account of the plant life of the country contemporaneously with the other accounts of the resources scheduled for completion in 1974.

The impetus now being given toward publication does not imply that the exploratory phase of botanical investigations of Papua New Guinea is over. On the contrary, the very compilation of existing data will expose large lacunae in the geographic coverage of the country.

Botanic field work during the year included a joint expedition with the Ryksherbarium, Leiden, to Mt Suckling in eastern Papua. Although the primary interest of the expedition was a comparative study of the flora of the alpine and sub-alpine areas of Mt Suckling with the flora of the western Owen Stanley Ranges, the opportunity was taken to adequately staff the expedition for collections from the forests at lower altitudes.

The development of the Botanic Garden has proceeded most satisfactorily with improvements and new plantings evident throughout.

## CHAPTER 7

### MINERAL RESOURCES

#### *Ministerial Responsibility*

During the year under review the Papua New Guinea Ministry exercised full authority and final responsibility in respect of the declaration of gold and mineral fields, the grant of Prospecting Authorities (except where these were likely to lead to the issue of special mining leases), the grant of mining tenements other than special mining leases and leases associated with them and the fixing of royalties in relation to these tenements; and for mine inspection and safety. The Administering Authority retained responsibility in respect of special mining leases, off-shore petroleum exploration and mining.

In the Second House of Assembly the Ministerial Member for Mines (and Public Works) was Mr O. I. Ashton, M.H.A. In the Third House of Assembly the Minister for Mines is Mr Paul Lapun, M.H.A.

#### *Legislation and Policy*

The laws in operation governing mining are the *Mining Ordinance 1928-1966* (New Guinea) and the *Mining Ordinance 1937-1966* (Papua) the *Mines and Works Regulation*

*Ordinance 1935-1962 the Petroleum (Prospecting and Mining) Ordinance 1951-1967 the Mining Development Ordinance 1955-1960 and the regulations made under these ordinances.*

The mining ordinances govern prospecting and mining for minerals generally and provide for the issue of miners' rights, the grant of prospecting rights and specified mining tenements, the registration of agreements and the payment of royalty and other fees. They also provide for the appointment of officers to administer the ordinances, confer powers on wardens and wardens' courts, and define the duties of these officers.

Under the ordinances all gold and minerals are reserved to the Administration, but an amendment of the *Mining Ordinance* in 1967 provides for the owners of private land to be paid an amount equal to 5 per cent of the royalties paid in respect of mining leases on that land. All other royalties derived from mining and prospecting are paid into the consolidated revenue of Papua New Guinea for the benefit of the inhabitants as a whole.

Expatriate producers are required to pay royalty at the rate of one and a quarter per cent of the value of the minerals produced less certain refining and realising charges. Papua New Guinean producers are not required to pay royalty except where the production is derived from land held under mining lease. In the case of small producers, royalty paid is remissible where the total royalty due in a period of 6 months does not amount to \$30. While there has been no commercial production of petroleum to date, provision exists for the payment of royalty at the rate of 10 per cent of the gross value of production at the well head.

In 1966 the mining ordinances introduced provisions for large-scale exploration and production operations. The provisions relating to prospecting and mining on private land were amended and 'private land' was defined to include 'native land'.

In respect of private land the provisions for payment of compensation for damage were made more explicit, and an occupation fee payable to the land-owner was introduced. The fee is at the annual rate of 5 per cent of the unimproved value, or \$1.00 per acre, whichever is the greater amount. In the case of the large prospecting authorities, which may be as large as 10,000 square miles, the occupation fee is payable only in respect of the

land actually occupied. In the case of mining leases or claims for the purpose of production, the occupation fee is payable in respect of the total area of the title, at the annual rate of 5 per cent of the unimproved value of the land, or \$2.00 per acre, whichever is the greater sum. If the owner of the land cannot be found, the money is to be paid to the Administration in trust on his behalf.

The Mines and Works Regulations provide for the operation, development and technical administration of mines. It is concerned with safety and health matters and establishes control over mining methods, operation of machinery, use of electricity and explosives, sanitation, ventilation and drainage.

The *Petroleum (Prospecting and Mining) Ordinance* deals with the issue of permits and the granting of licences and leases for the exploration of oil fields on land. Except with the authority of the Governor-General, permits must not cover more than 10,000 square miles and the area must be reduced progressively to a maximum of 2,500 and 500 square miles at the licence and lease states respectively.

Offshore exploration for petroleum is controlled by the Australian Government's *Petroleum (Submerged Lands) Act 1967-1968*.

The *Mining Development Ordinance* authorises various forms of assistance to the mining industry, including financial advances on a dollar for dollar basis to persons engaged in developmental mining, assistance for the test drilling of favourable mineral deposits, advances for cross-cutting, drainage or road making, the establishment of crushing plants and the payment of advances on ores to be marketed outside Papua New Guinea. Provision is made for the Papua New Guinea Government to undertake any of the above operations where it is considered that to do so would be in the interests of the mining industry.

#### *Mining Administration*

The Department of Lands, Surveys and Mines administers the mining legislation through the Division of Mines. The Geological Survey Branch of the Department is staffed by officers of the Commonwealth of Australia Bureau of Mineral Resources, Geology and Geophysics, who work in close co-operation with the Division of Mines.

Wardens of gold and mineral fields are appointed by the Administrator under the mining ordinance to issue miners' rights

grant and register claims, hear applications and objections in relation to the granting of mining tenements generally, arbitrate mining disputes and make recommendations on matters reserved for decision by him. Decisions of a Warden's Court are subject to appeal to the Supreme Court of Papua New Guinea.

Inspectors of Mines are appointed to exercise controls, as prescribed in the Mines and Works Regulations, over the physical operations of mining in matters relating to safety and health, and to perform other duties of a technical nature.

The Division of Mines maintains a technical section responsible for the operation of boring plants owned by the Papua New Guinea Government and hired at nominal rates to individuals or mining companies for approved development drilling projects. Diamond drilling and percussion drills have been in operation during the year. The division also employs field assistants to assist and encourage alluvial gold mining by Papua New Guineans.

#### *Mining by Papua New Guineans*

Papua New Guineans have all the rights conferred by the mining ordinances upon the holder of the miner's right and may take up, use or occupy Administration land or customary land owned by them for mining purposes as defined by the ordinance under the same terms and conditions as expatriate miners.

Efforts are made to improve the knowledge of indigenous miners about the technical, legal and administrative aspects of the mining industry, and to encourage them to search for and exploit the primary sources of gold and other minerals.

Tables 1 and 2 of Appendix XII indicate the extent of participation in the development of mineral resources by Papua New Guinea miners.

Organised mining for alluvial gold is carried out in the East and West Sepik, Eastern Highlands, Morobe and Western Highlands Districts.

Government field assistants patrolling the mining areas supervise Papua New Guinean miners and instruct them in the types of alluvial methods best suited to specific claims and in mining law. They also help them mark out and register new claims and procure mining tools.

Where banking facilities are available the Papua New Guinean miner is encouraged to

operate as an independent client of the bank, lodging his gold at the bank and receiving the proceeds through the bank account. Where banking facilities are not available the Papua New Guinea Government undertakes receipts of gold parcels and payment of proceeds to the miners.

To overcome difficulties of maintaining accurate official records of business identity documents which include a photograph of the miner have been issued.

In the Morobe and Western Highlands Districts indigenous mining parties operate under tribute agreement with the owners of mining claims. A subsidy is payable to small producers of gold, both Papua New Guinean and expatriate, by the Australian Government.

#### *Mining Development*

Measures being taken to stimulate mining production include:

- (i) a progressive regional geological survey of Papua New Guinea by officers of the Australian Bureau of Mineral Resources, Geology and Geophysics;
- (ii) detailed geological surveys, as necessary, of mines, mineral fields and ore deposits;
- (iii) geochemical and geophysical surveys to assist work under (i) and (ii);
- (iv) an assay laboratory to provide a free assay service to prospectors and to mines under active development;
- (v) provision of assistance for developmental mining by way of loans and exploratory drilling; and
- (vi) extension of the field service to assist mining by Papua New Guineans.

During the year Papua New Guinea Government drills completed 5865 ft of drilling for Village Water Supply and Public Utilities Hydro-electric Dam Site Investigation, Bridge Site Investigations, and Mineral Exploration.

#### *The Mining Industry*

Gold and silver have, in the past, been the only important mineral products of Papua New Guinea. Most of the gold is won from the Wau/Bulolo area in the Morobe District by ground sluicing and other alluvial mining methods, and in the case of manganocalcite lodes near Wau, by open-cut mining. Alluvial gold is produced by many small groups of Papua New Guinean miners from localities

widely scattered throughout the Morobe, Eastern Highlands, Western Highlands, the East and West Sepik, Gulf, Northern and Milne Bay Districts.

A new mining industry commenced in April 1972 when the Bougainville Copper Pty Ltd mine at Panguna commenced production. The mine is one of the largest in the world and investment expenditure in construction of the mine, town sites, road and other communications was about \$400m. The projected annual rate of production is 600,000 short tons of copper concentrates containing almost 200,000 tons of copper, 700,000 fine ounces of gold and 1.4 million fine ounces of silver. Based on current sales contracts the value of exports should be \$160m annually. Occurrences of other minerals including copper, iron, lead, zinc, nickel, chrome, sulphur and low-grade coal have been reported and investigated.

During the year under review interest continued to be shown by major mining companies in exploration for minerals, particularly those containing base metals. The number of prospecting authorities in force at the end of June 1972, was 106, totalling 39,225 square miles. The Kennecott Explorations (Australia) Pty Ltd copper deposit in the Ok Tedi locality is the most advanced of potential mining prospects and developmental drilling may commence during the year 1972-73.

Other prospects which appear to have potential, provided the deposits can be exploited economically, are the copper deposit on the Frieda River near the boundary of the East and West Sepik Districts, being investigated by Mount Isa Mines Ltd and the deposit on Manus Island being investigated by Exoil NL and the Transoil NL.

#### *Production*

Figures for the annual production and value of minerals produced for the five-year period ended 30 June 1972 for Papua New Guinea are given in Appendix XII, Table 3.

Large scale gold production dates from the discovery of rich alluvial deposits in the Morobe District in 1920. Production was greatly increased in 1930 by the installation of dredges and by 1940 the gold output of Papua New Guinea reached 270,000 fine ounces a year.

Copper concentrates from Bougainville contain significant quantities of gold and silver.

#### *Geological and Volcanological Services*

*Administration.* These services are provided throughout Papua New Guinea by the Geological Survey Division. The professional staff of the Geological Survey Division are attached to the Papua New Guinea Government from the Australian Bureau of Mineral Resources, Geology and Geophysics, which also provides Canberra based parties to carry out regional reconnaissance geologic mapping and geophysical surveys in Papua New Guinea.

The Chief Government Geologist has his headquarters in Port Moresby. The Geological Division is divided into three sections: Regional Mapping and Mineral Investigations, Engineering Geology and Hydrogeology, and Volcanology. The first two sections are based at Headquarters in Port Moresby, while the Volcanological Section is based at the Central Volcanological Observatory at Rabaul. Volcanological Observatories are maintained on Manam Island and at Esa'ala on Normanby Island. Volcanological stations are also established near the principal volcanoes where the population is at risk from volcanic eruptions. The number of these stations is gradually increasing to keep pace with both rural and urban development.

*Operations.* There has again been a considerable increase in demands for the services of the Geological Survey Division over the past year and this has necessitated further increases in staff and equipment.

International liaison has been maintained and a number of projects, especially in the fields of seismology and volcanology have been continued in conjunction with authorities in the United Kingdom as well as Australia.

Regional mapping activities included the systematic reconnaissance and geologic field work over the area of the Yule and Port Moresby 1:250,000 sheets and the compilation of field data into draft maps and reports; completion of the compilation of maps and reports covering the Huon and Markham 1:250,000 sheets and contributions to the 1:1,000,000 Geological Map of Papua New Guinea, the preliminary edition of which was produced and the first coloured edition of which is in an advanced stage of drafting.

Mineral investigations included evaluation of deposits on Karkar Island, assistance to Papua New Guinea holders of a prospecting authority in the Morobe District, the preparation of a map of mineral occurrences in Papua New Guinea and the identification of a large

number of rock and mineral specimens for the public and other departments. The annotated catalogue of data files is being revised and brought up to date in preparation for the publication of a second edition.

Engineering geology investigations were in greater demand than ever and included work on hydro-electric schemes, new road alignments, ground water and construction materials.

The most important hydro-electric investigations involved feasibility studies for the Musa Scheme and preliminary studies in the Pio-Purari catchments, together with construction services for the Upper Ramu Scheme.

Three District village water supply surveys were completed and preliminary surveys of ground water potential were carried out in the Markham Valley and at Rabaul. A number of smaller ground water investigations were completed.

In addition to advice on a number of new major road alignments and to the selection of construction materials for roads and airports a start was made on the preparation of detailed engineering geology maps for the urban areas of the country.

Volcanological services were maintained at the major volcanic centres and the instrumentation for the new telemetered surveillance stations was put on test. Installation of five of these stations are programmed for the following year.

There was no major volcanic activity during the year but Manam volcano continued in a state of moderate activity and Ulawun Kar Kar showed some fumarolic activity.

Two major earthquakes occurred off New Britain in July and these were followed by a large number of aftershocks. These were the largest earthquakes recorded in the region. A further major earthquake occurred near Kimbe in New Britain which produced vertical ground accelerations greater than 1g (the force of gravity). In July alone over 2,000 shocks were recorded on the instruments at the Central Volcanological Observatory at Rabaul. Injury and damage from earthquakes were comparatively slight: three people were reported killed.

Field officers of the Department of the Administrator, missionaries, teachers, pilots of aircraft and the general public continued to supply valuable information on volcanic and seismic activity throughout the Territory.

## CHAPTER 8 INDUSTRIES

### *Ministerial Responsibility*

A statement of the responsibilities exercised by the Minister for Trade and Industry may be found at the beginning of Chapter 2 of this Section of this Part.

### *Department of Trade and Industry*

The Department of Trade and Industry is concerned with international trade relations, commodity and tariff policy; the promotion and sale of Papua New Guinea products; promotion and assistance in the development of manufacturing and service industries; the administration of foreign investment policy; the administration of customs and excise legislation; and finally with the administration of migration, nationality and citizenship legislation.

Within the Department there is a Division of Industrial Development, the functions of which are to promote investment and service inquiries in manufacturing, service and tourist industries; to conduct research into manufacturing and service industries with regard to land, labour, finance and resource utilisation, aimed at assessing their value to the economy and forecasting growth patterns. The division also conducts feasibility studies to isolate new export and import replacement industries and research into the tourist industry with regard to visitor traffic, accommodation and tourist services.

The division also examines and processes requests from industry for pioneer industry benefits and the initial processing of requests for assistance for tariff protection or relief. It is also concerned with the development of overseas investment policy and the examination of proposals to ensure conformity with government policy.

There is, in the department, a division concerned with external trade relations, a division concerned with trade promotion and finally a division concerned with customs and migration.

### *Manufacturing Industries*

Originally secondary industry in Papua New Guinea consisted of simple service industries such as bakeries and bottling plants. More recently the trend has been to set up more highly capitalised and technically complex industries. These include such industries as shipbuilding, manufacture of glass bottles,

industrial chemicals, concrete products, wooden and steel furniture, fibreglass products and industrial gases, general engineering, plumbing and electrical services, and other varied types of industry. The rapid development of the infrastructure and the Bougainville mining venture continue to exert a considerable impact on the growth of the industrial sector.

During the last year, numerous investment inquiries have been received, including proposals to establish such industries as tanning, flour milling, fish canning, sago flour, rice milling, cement, asbestos cement, textiles, soap, radio transceivers and coil springs.

#### *Tourist Industry*

The unique attractions of Papua New Guinea are bringing in increasing numbers of tourists. Short-term visitor arrivals for 1971-72 increased by just under 12 per cent over the previous year, from 40,600 to 45,300.

The availability of hotel accommodation in the towns and in out-lying areas is increasing and the standard of accommodation continues to improve, but generally, the availability of accommodation is only just keeping pace with demand.

The Boeing 727 service between Sydney and Port Moresby is bringing larger numbers of overseas visitors to Papua New Guinea. More frequent services from Sydney and Honiara are further increasing the traffic. This extra traffic has necessitated a growth of about 25 per cent per annum in internal air traffic.

The Papua New Guinea Tourist Board, established in 1966 to promote the tourist industry, produces films and publishes pamphlets and posters for distribution outside Papua New Guinea. The Board has encouraged the setting up of regional tourist associations in Port Moresby, Madang, Lae, Rabaul and Goroka to develop local attractions and improve facilities for tourists.

#### *Fuel and Power Facilities*

*Legislation.* The Papua New Guinea Electricity Commission is a statutory authority constituted under the *Papua and New Guinea Electricity Commission Ordinance* 1961-1971. The Ordinance came into full operation on 1 July 1963 repealing the *Electricity Supply Ordinance* 1951 under which the Administration, through the Electrical Undertakings Branch of the Department of Public Works previously

exercised control over the generation and supply of electricity in Papua New Guinea.

The principal functions of the Commission, as specified in the ordinance, are:

- (i) to plan and co-ordinate the supply of electricity throughout Papua New Guinea;
- (ii) to generate, transmit, distribute and sell electricity; and
- (iii) to provide to the public and to the Papua New Guinea Government services related to the sale, consumption and use of electricity.

The day-to-day operations and related functions of the Commission are regulated by the following By-laws made under the ordinance:

- (i) *Electricity Commission (Conditions of Supply) By-Laws* 1963;
- (ii) *Electricity Commission (Service and Installation) By-Laws* 1966;
- (iii) *Electricity Commission (Licensing of Electrical Contractors and Electricians) By-Laws* 1966; and
- (iv) *Electricity Commission (Approval of Electrical Appliances) By-Laws* 1971.

Under the *Electricity Commission (Conditions of Supply) By-Laws*, the declaration of Tariff Zones is reserved for the Administrator, and the fixing of the rate of electricity throughout the country is under the final control of the Administrator's Executive Council. The operations and functions of the Commission are further affected by the following legislation:

- (i) *Electricity Commission (Productive Use of Land) Ordinance* 1971—in relation to its functions as a hydro-electric authority under a water power lease;
- (ii) *International Bank (Ramu Hydro-electric Project) Loan Agreement Ordinance* 1971—ratifying the Loan Agreement between the International Bank for Reconstruction and Development and the Administration, and the Project Agreement between the Bank and the Commission in respect of the Ramu Project; and
- (iii) *Water Resources Ordinance* 1962-1970—under which the Commission holds water investigation permits and water power leases.

Other important provisions relating to the Electricity Commission are contained in the following legislation:



(i) the *Public Services Conciliation and Arbitration Ordinance* 1969-1970 which provides for the appointment of a Conciliation and Arbitration Tribunal for the hearing and determination of claims submitted on behalf of officers and employees of the Public Service;

(ii) the *Superannuation (Papua and New Guinea) Ordinance* 1951-1971, which provides for pension and provident fund benefits for overseas officers; and

(iii) the *Workers' Compensation Ordinance* 1958-1971, which provides for compensation payments in respect of injury or incapacity arising out of or in the course of employment.

*Administration:* The Electricity Commission has no Papua New Guinea Government Minister at its head. However, the Commission petitions and advises through the Minister for Internal Finance in matters which require Government attention.

The Commission is headed by the Commissioner who is appointed by the Minister of State for External Territories on the recommendation of the Administrator. Four Associate Commissioners, representing consumers in various areas of the country, are similarly appointed. The First Assistant Treasurer (Budget and Accounting) as another Associate Commissioner represents the Papua New Guinea Government on the Board. At present there are 2 Papua New Guinean Associate Commissioners and 3 expatriates. Control of the Commission's internal affairs is through 2 Assistant General Managers, one in charge of Finance and Administration, the other in charge of Engineering Operations.

*Electricity Supply.* The Commission owns and operates power stations in Port Moresby, Lae, Rabaul, Madang, Goroka, Wewak, Kavieng and Samarai. In several other larger centres, Mt Hagen, Kundiawa and Kainantu, the Commission administers, operates and maintains power stations owned by the Papua New Guinea Government. In smaller centres, the Commission maintains and operates generating facilities on behalf of the Papua New Guinea Government. Most centres are supplied by diesel generated power while Port Moresby,

Goroka, Lae and several small Administration stations utilise hydro-generated power. In Port Moresby, all power is generated at hydro-stations on the Laloki River. At present there are two stations in operation with a total installed capacity of 35.5 MW. Other work under construction will provide a further 13.5 MW for the Port Moresby system in 1973. In Lae, diesel generation is supplemented by hydro-generated power purchased from Commonwealth-New Guinea Timbers Pty Ltd (previously Placer Development Ltd) at Baiune. Goroka's diesel station is also supplemented by a small hydro-station of 600 kW capacity.

*Upper Ramu Scheme.* In the Eastern Highlands the Commission is undertaking a multi-million dollar project to develop the power resources of the Upper Ramu River. The project has been divided into two stages, the first of which will provide a 75 MW underground power station that will supply electricity to the towns of Lae, Madang, Goroka, Mt Hagen and smaller intermediate centres through a network of 347 miles of transmission lines. After the first year of the contract, the support township named Yonki, was nearing completion and the major civil contractors, Hyundai Construction Co. Ltd of South Korea, were on site and had made initial excavations for the pressure and access shafts and tailwater tunnel. The mechanical and electrical contract was won by Progres International of Yugoslavia. By 1975, three 15 MW units are expected to be in operation and supplying electricity to the various centres on the transmission network. Diesel plant in these centres will be maintained on stand-by. The Commission has undertaken an extensive public relations programme in connection with the Ramu Scheme. Groups of liaison officers are stationed throughout the area to be supplied to distribute information on the project through movie films, news sheets and by word of mouth. The World Bank has granted a loan of \$20.6m for the project.

*Generation.* The following table shows units generated in Commission owned and Commission administered centres during the 1971-72 financial year.

**COMMISSION POWER STATIONS:  
UNITS GENERATED FOR THE YEAR 1971-1972**

| Centre                 | Hydro              | Percentage increase | Diesel            | Percentage increase | Total              | Percentage increase |
|------------------------|--------------------|---------------------|-------------------|---------------------|--------------------|---------------------|
|                        | kWh                |                     | kWh               |                     | kWh                |                     |
| Goroka .. ..           | 3,679,206          | 18.10               | 5,111,850         | 30.80               | 8,791,056          | 25.13               |
| Kavieng .. ..          | ..                 | ..                  | 1,568,546         | 13.28               | 1,568,546          | 13.28               |
| Lae .. ..              | (a)27,017,700      | 4.39                | 17,708,780        | 31.77               | 44,726,480         | 13.75               |
| Madang .. ..           | ..                 | ..                  | 12,081,780        | 16.35               | 12,081,780         | 16.35               |
| Port Moresby .. ..     | 103,709,000        | 5.19                | ..                | ..                  | 103,709,000        | 5.19                |
| Rabaul .. ..           | ..                 | ..                  | 19,507,020        | 8.10                | 19,507,020         | 8.10                |
| Samarai .. ..          | ..                 | ..                  | 865,222           | 6.98                | 865,222            | 6.98                |
| Wewak .. ..            | ..                 | ..                  | 7,376,340         | 7.44                | 7,376,340          | 7.44                |
| Yonki .. ..            | ..                 | ..                  | 253,555           | ..                  | 253,555            | ..                  |
| <b>Total .. ..</b>     | <b>134,405,906</b> | <b>5.34</b>         | <b>64,491,093</b> | <b>17.56</b>        | <b>198,896,999</b> | <b>9.00</b>         |
| Excluding Baiune .. .. | 107,388,206        | 5.58                | ..                | ..                  | 171,861,299        | 9.78                |

(a) Purchased from Commonwealth New Guinea Timbers Pty Ltd (Baiune)

*Installed Capacity.* The following table shows installed capacities of Commission owned and Commission administered centres at the end of the 1971-72 financial year:

**COMMISSION POWER STATION PLANTS AT 30 JUNE 1972**

| Location               | No. and size in kW                         | Total        | Maximum demand | Location                                    | No. and size in kW            | Total            | Maximum demand   |
|------------------------|--|--------------|----------------|---|-------------------------------|------------------|------------------|
|                        |  | MW           | MW             |   |                               | MW               | MW               |
| <i>Diesel Stations</i> |  |              |                | <i>Hydro Stations</i>                       |                               |                  |                  |
| Goroka .. ..           | 2 x 522<br>1 x 392<br>3 x 250              | 2.186        | (a)1.97        | Goroka .. ..                                | 1 x 200<br>2 x 100<br>1 x 200 | 0.60             | Port Moresby ..  |
| Kavieng .. ..          | 3 x 150<br>1 x 210                         | 0.65         | 0.31           | Rouna 1 .. ..                               | 1 x 2500<br>3 x 1000          | 5.50             | ..               |
| Lae .. ..              | 3 x 2400<br>2 x 840<br>2 x 320<br>1 x 320  | 9.84         | (a)7.84        | Rouna 2 .. ..                               | 5 x 6000                      | 30.00            | 20.30            |
| Madang .. ..           | 1 x 1500<br>1 x 1340<br>2 x 530<br>1 x 500 | 4.40         | 2.32           | <b>Total .. ..</b>                          | <b>..</b>                     | <b>36.10</b>     | <b>..</b>        |
| Rabaul .. ..           | 2 x 1200<br>2 x 840<br>4 x 320             | 5.36         | 3.46           | <b>STATIONS UNDER COMMISSION MANAGEMENT</b> |                               |                  |                  |
| Samarai .. ..          | 2 x 150<br>1 x 140                         | 0.44         | 0.25           | Station                                     | Hydro                         | Diesel           | Total            |
| Wewak .. ..            | 3 x 530<br>2 x 250                         | 2.09         | 1.38           |   | kWh                           | kWh              | kWh              |
| Yonki .. ..            | 1 x 470<br>1 x 280<br>1 x 250              | 1.00         | 0.26           | Kainantu .. ..                              | ..                            | 517,768          | 517,768          |
| <b>Total .. ..</b>     | <b>..</b>                                  | <b>25.96</b> | <b>..</b>      | Kundiawa .. ..                              | ..                            | 509,290          | 509,290          |
|                        |  |              |                | Mount Hagen .. ..                           | 394,122                       | 4,439,222        | 4,833,344        |
|                        |  |              |                | <b>Total .. ..</b>                          | <b>394,122</b>                | <b>5,466,280</b> | <b>5,860,402</b> |

(a) Systems demand includes Hydro

STATIONS UNDER COMMISSION  
MANAGEMENT AT 30 JUNE 1972

| Location       | No. and size in kW            | Total | Maximum demand |
|----------------|-------------------------------|-------|----------------|
|                |                               | MW    | MW             |
| <i>Diesel</i>  |                               |       |                |
| Kainantu ..    | 3 x 100                       | 0.30  | 0.132          |
| Kundiawa ..    | 3 x 100                       | 0.30  | 0.120          |
| Mount Hagen .. | 2 x 175<br>1 x 250<br>3 x 373 | 1.719 | (a)1.105       |
| <i>Hydro</i>   |                               |       |                |
| Mount Hagen .. | 1 x 64<br>1 x 60              | 0.124 | ..             |

(a) System demand includes Hydro

*Government-owned Stations.* Installed capacity of the 134 Administration-owned stations was 13.1 MW. This included 3 centres, Mt Hagen, Kundiawa and Kainantu, now administered by the Commission for the Papua New Guinea Government.

|                    | Centres |            |       | Sets  |            |       | Installed Capacity (V) |            |        |
|--------------------|---------|------------|-------|-------|------------|-------|------------------------|------------|--------|
|                    | Papua   | New Guinea | Total | Papua | New Guinea | Total | Papua                  | New Guinea | Total  |
| Continuous duty .. | 44      | 87         | 131   | 94    | 177        | 271   | 1,178                  | 3,683      | 4,861  |
| Cat. 'B' ..        | 6       | 6          | 12    | 18    | 23         | 41    | 1,656                  | 2,372      | 4,028  |
| Stand-by ..        | 1       | 6          | 7     | 1     | 7          | 8     | 20                     | 259        | 279    |
| M.F. ..            | 8       | 19         | 27    | 8     | 21         | 29    | 177                    | 1,206      | 1,383  |
| Training ..        | 1       | ..         | 1     | 7     | ..         | 7     | 65                     | ..         | 65     |
| Auto ..            | 1       | 2          | 3     | 2     | 4          | 6     | 40                     | 40         | 80     |
| Totals ..          | 61      | 120        | 181   | 130   | 132        | 355   | 3,136                  | 7,560      | 10,696 |

The above figures include mains failure, stand-by, automatic and training installations.

*The Year's Activities.* Major maintenance and additional generating plants were installed as follows:

- Lae Power Station in July 1971, 2,400 kW, after fitting of a new crankshaft by the manufacturers.
- Rabaul experienced two severe earth tremors during the year resulting in minor damage to the power station plant. No. 5—840 kW set was out of service for five months following a bearing failure and consequent crankpin damage. No. 7—1200 kW set was frequently out

of service due to mechanical and electrical breakdowns necessitating load shedding at peak periods.

- A 1500 kW diesel set was commissioned at Madang in March 1972.
- A second 522 kW diesel set was installed and commissioned at Goroka in August 1971 and an additional 200 kW set installed and commissioned in December 1971 at the Hydro station.
- The 210 kW diesel set previously at Wewak was transferred and installed at Kavieng Power Station.

- The first three generating sets at Yonki Diesel station were installed and commissioned in February 1972 the sets transferred from Goroka and Kone Power stations.
- At Mt Hagen two 392 kW diesel sets were installed and commissioned.

*New Plant on Order.* Orders have been placed for the following generating plant:

- Port Moresby—1 x 1520 kW turbo generator, 2 x 6000 kW turbo generators.
- Goroka—3 x 600 kW diesel generators.
- Keravat—2 x 600 kW diesel generators.
- Madang—1 x 1500 kW diesel generator.
- Lae—2 x 3200 kW diesel generators
- Upper Ramu—3 x 15000 kW turbo generators.

*Future Development.* Current investigations include a feasibility study of the Musa River area where a scheme of 400 MW is thought to be possible, an interconnecting system with the Upper Ramu Scheme to augment Port Moresby's supply, and the possibilities of a large diesel power station at Baruni near Port Moresby.

The Commission is continuously aware of the ultimate objective of supplying cheap power to all parts of the country through interconnection and the utilisation of excess capacity of low cost generating plant installed for a large industrial load such as a mining venture or smelter works.

## CHAPTER 9 TRANSPORT

### *Formation of the Department of Transport*

The 1963 Mission from the International Bank for Reconstruction and Development noted the importance of transport to the economic development of Papua New Guinea and recommended that the organisation, regulation and development of transport by land, sea and air be appraised and promoted as a single integrated concept. To this end, the Mission called for the establishment of a Department of Transport having eventual responsibility for all transport matters.

This led to the formation of the Directorate of Transport and the appointment, in March 1967, of a Co-ordinator of Transport. The Directorate's responsibilities were primarily the formulation of Administration

land, sea and air transport policy, the execution of comprehensive transport studies, the incorporation of transport projects in the annual works programme and the long-term planning of public sector investment in transport facilities.

The final report of the United Nations Development Programme Transport Consultants who visited Papua New Guinea in 1968-69, under the aegis of the World Bank, recommended the establishment of a new department which would incorporate all the staff and activities of the Directorate, become directly involved in transport regulation, and assume responsibility for the provision of land staff and activities of the directorate, become and sea transport to the Papua New Guinea Government itself. Proposals along these lines were accepted by the Minister of State for External Territories and on 4 August 1970 the new Department of Transport was created. Mr Joseph Lue, MHA for Bougainville Regional was given ministerial responsibility as Assistant Ministerial Member for Transport and a Departmental Head was appointed.

A further stage in the development of the Department of Transport took place on 28 April 1972 when, by a determination pursuant to section 24 of the *Papua New Guinea Act 1949-1971*, the position of Minister of the House of Assembly for Transport was created, and Mr Bruce R. Jephcott, MHA Member for Madang Regional, was appointed to the position.

### *Ministerial Responsibility*

At 30 June 1972 the Minister for Transport held full authority and final responsibility for the following functions:

- Coastal shipping services
- Vehicle operating standards and load limits
- Control of passenger transport
- Road safety
- Advisory service to privately owned shipping, airline and road transport services
- Government-owned aerodromes
- Operation and maintenance of Administration fleet and transport vehicles
- Inquiries into shipwrecks and disasters inside territorial waters
- Registration and regulation of shipping
- Regulation and operation of ports (other than ports controlled by Papua New Guinea Harbours Board) and pilotage
- Nautical training other than post-secondary level

- Examination and certification of masters and engineers
- Board of Reference (under Shipping Ordinance)
- Marine Board of Inquiry of New Guinea
- Marine Board of Papua
- Passenger Transport Control Board
- Port Advisory Committee

The Administering Authority retained authority for Government fleet policy, the Papua New Guinea Harbours Board, navigational aids, and matters of international maritime law.

#### *Organisation of the Department*

The new department represents the amalgamation of the former Directorate of Transport, the former Division of Marine Transport of the Department of Trade and Industry and the former Transport Branch of the Department of Treasury. These have been reorganised into four executive Divisions and an Administration Division. Each executive division will be headed by an Assistant Secretary.

The four executive divisions are:

- Studies and Statistics
- Policy and Programmes
- Road Operations
- Marine Operations

#### *Functions of the Department*

The new Department has the following functions approved by the Minister of State for External Territories:

- (i) undertake studies relating to the administration and development of transportation systems within Papua New Guinea;
- (ii) develop, formulate, recommend and implement transportation policies and programmes for facilities, services and regulation, including those for the relevant Statutory Authorities;
- (iii) formulate and administer transportation legislation;
- (iv) operate Government transport fleets, and train Papua New Guineans in all aspects of maintenance and operation of these;
- (v) where necessary operate and maintain the Papua New Guinea Government's transport facilities (airfields, ports and training institutions).

#### *Legislation*

The principal ordinances and Acts affecting transportation in Papua New Guinea are set out below.

#### Papua New Guinea Ordinances

- *Marine Board Ordinance*
- *Marketing of Heavy Weight and Packages Ordinance 1951*
- *Minimum Age (Sea) Ordinance 1957-1962*
- *Mining (Bougainville Copper Agreement) Ordinance 1967*
- *Motor Traffic Ordinance 1950-1970*
- *Navigation Ordinance 1966 (Papua)*
- *Papua New Guinea Harbours Board Ordinance 1963-1971*
- *Passenger Transport Control Board Ordinance 1968-1971*
- *Port Charges Ordinance 1957-1967*
- *Roads Maintenance Ordinance 1953-1971*
- *Sea-carriage of Goods Ordinance 1951*
- *Seamen Unemployment and Indemnity Ordinance 1951-1953*
- *Shipping Ordinance 1951-1960*
- *Transport (Collection of Information) Ordinance 1969-1970*
- *Wreck and Salvage Ordinances 1902-1971*

#### Australian Acts

- *Airlines Equipment Act*
- *Air Navigation Act 1920-1966*
- *Civil Aviation Agreement Act*  
(Administered by the Australian Department of Civil Aviation)
- *Commonwealth Navigation Act*  
(Administered by the Australian Department of Shipping and Transport in consultation with the Department of Transport)
- *Lighthouses Act 1911-1970*

International Treaties, Conventions and Agreements

See Appendix XXXIII.

#### *Roads*

Roads provide the only alternative to transportation by coastal shipping, a few inland water-ways and use of aircraft. The road network is of great and growing commercial significance, particularly for the densely populated highlands districts and areas principally engaged in tropical agriculture, such as New Ireland, New Britain, Bougainville and the Sepik Districts. The gradual extension of the road network from Port Moresby towards Bereina is also opening up new areas for agriculture.

Construction of the Sepik Highway is continuing towards Lumi which will provide road

access for some 35,000 people to the coast and increase the economic development of the area.

The Southern Highlands Highway is expected to be completed in 1972-73, thus linking the Southern Highlands District with the Highlands Highway and hence to the coast at Lae.

Road construction and maintenance are undertaken by the Australian Department of Works and the Papua New Guinea Department of Public Works, or under contracts let by these departments to private enterprise and local government councils. Terrain and climatic conditions make construction and maintenance exceedingly difficult and often very expensive.

Most roads are of improved earth construction with gravel or coronus in weaker sections. However, major routes are generally of superior design and construction, providing a good running and well graded surface of gravel or compacted coral and permanent bridging of steel and concrete construction.

The Papua New Guinea road network comprises approximately 15,329 kilometres of road, of which 3,765 kilometres are classified as highway or trunk roads and 692 kilometres as urban roads. The majority of urban roads are sealed, as is the road from Rabaul to Kokopo.

Expenditure on construction and maintenance of roads and bridges during each of the last five financial years is as follows:

#### PAPUA NEW GUINEA

| Year       | Maintenance | Construction | Total      |
|------------|-------------|--------------|------------|
|            | \$          | \$           | \$         |
| 1967-68 .. | 5,149,167   | 4,956,279    | 10,105,446 |
| 1968-69 .. | 6,049,695   | 5,268,833    | 11,318,528 |
| 1969-70 .. | 7,530,701   | 5,985,405    | 13,516,106 |
| 1970-71 .. | 8,545,978   | 7,737,842    | 16,283,820 |
| 1971-72 .. | 9,590,274   | 15,442,653   | 25,032,927 |

Particulars of road classification and mileage are indicated at Table 13, Appendix XV.

Principal roads extend from the major ports of Port Moresby, Lae, Madang, Wewak, Kavieng, Rabaul, Kimbe, Buka Passage and Kieta. Economically these roads are the most significant since they link areas of intensive primary production and land population density with ports through which most import-export trade is handled. Secondary roads, especially in the Highlands districts, provide

access for large populations engaged in growing coffee, cocoa, tea, tobacco, timber, pyrethrum, cattle and other primary produce; exports by use of these roads are therefore of considerable importance to regional and national economic growth.

*Road Transport.* The comparative expenditure figures quoted above indicate that increasing emphasis is being placed on road maintenance and construction. Increased standards and mileage of road, required by increased vehicular usage, are indicated by comparison of total vehicle registrations at the close of each of the last five calendar years as follows:

#### NUMBER OF VEHICLES REGISTERED IN PAPUA NEW GUINEA

| Year     | 1967   | 1968   | 1969   | 1970   | 1971   |
|----------|--------|--------|--------|--------|--------|
| Total .. | 20,696 | 25,459 | 29,236 | 34,667 | 38,163 |

More detailed particulars of vehicle registration are provided at Appendix XV, Table 12.

The increase in number of vehicles has led to wider usage particularly by Papua New Guineans driving licences issued during the period 1966-1970 clearly indicate a quickening interest by Papua New Guineans.

#### NUMBER OF DRIVING LICENCES ISSUED

| Year       | Licences held by   |        |
|------------|--------------------|--------|
|            | Papua New Guineans | Others |
| 1967 .. .. | 9,944              | 20,451 |
| 1968 .. .. | 12,147             | 23,132 |
| 1969 .. .. | 14,765             | 26,437 |
| 1970 .. .. | 20,289             | 30,106 |
| 1971 .. .. | 23,361             | 32,146 |

#### Railways

There are no railways in Papua New Guinea and there are no plans for their introduction, since geophysical conditions preclude economic construction or usage.

#### Civil Aviation

Civil Aviation in Papua New Guinea is administered by the Australian Department of Civil Aviation and operated in accordance with the standards and recommended practices of the Chicago Convention and the International Civil Aviation Organisation.

*Operating Conditions.* Flying conditions in Papua New Guinea are among the most difficult to be found anywhere in the world. The high mountain ranges, where many of the airstrips are located, are often obscured by heavy clouds which build up steadily during the day towering to heights of 40,000 to 50,000 ft. Safe operations are therefore dependent on a high degree of experience and skill of the pilots. Pilots are not allowed to act in command of aircraft until they have become thoroughly familiar at first hand with the routes and operating conditions.

As there are few level sites in the highlands, airstrips have had to be built on steep slopes, perhaps on razor-back ridges and sometimes in narrow valleys with very little room for aircraft to manoeuvre. Most of them have been constructed without the aid of any equipment other than hand tools; they usually have grassy surfaces but some become dangerously slippery after even light rain. On steeply sloping strips aircraft land up-hill and take off down-hill. As there is no choice of alignment many airstrips have tricky adverse wind conditions often aggravated in the afternoons by turbulence on the approaches near the ground.

Weather conditions in the highlands change rapidly during the day. Fog sometimes persists until mid-morning. Pilots have to be on the alert not to get trapped in valleys by a lowering cloud base during the afternoons. These changing conditions defy forecasting; pilots therefore keep up a flow of local weather reports to flight service radio stations operated by the Department of Civil Aviation so that others can be informed which routes are open and which are likely to be closed.

These radio stations are located in the eight flight information areas into which the region is divided. All these major centres are joined to each other by fixed service communication channels and to Port Moresby. The relative positions of all aircraft are recorded and flight planning information relating to weather, state of aerodromes and navigational facilities is immediately available.

The Department of Civil Aviation also maintains air traffic control units at Port Moresby, Lae, Madang, Wewak, Goroka and Mount Hagen. An important function of these centres is to ensure the safe, orderly and quick flow of air traffic. Aircraft

flying in control zones and control areas are kept at a safe separation from each other by controllers on the ground. An operational control service is provided to supervise the progress of flights to check that regulations concerning safe operations are observed and the proper allowances made for likely contingencies. To date aeronautical information is always available at these centres.

A search and rescue organisation is kept at standby status ready to be activated at short notice. Storepedos containing survival and medical equipment packed for air-dropping and other equipment are held at Port Moresby, Daru, Lae, Madang, Wewak, Goroka, Mount Hagen and Rabaul. Inflatable liferafts are maintained at the coastal centres. Air searches are co-ordinated by Air Traffic Control Search Masters and are available to other government agencies on request.

*Air Transport Services.* Scheduled regular public transport services are operated by the Australian domestic airlines. Three air charter companies operate quite extensive networks of commuter or third level scheduled services within the Central, Milne Bay, Northern, Gulf, Western, Madang, Eastern Highlands, Chimbu, Western Highlands, Southern Highlands, East Sepik and West Sepik Districts of Papua New Guinea. Such operations play a vital role between the airline services and general charter operations in the provision of regular public transport services to many isolated communities and villages.

In addition, charter operations still play a significant part in the air transport role. A total of twenty-five organisations provide such services to the public, whilst a further forty-one organisations/persons have aircraft for their own use.

The Government has not participated in the ownership of any airline or air charter company. During the merger of Papuan Airlines and Ansett Airlines of Papua New Guinea, the Government obtained an option to take up to 20 per cent of the shares of the new company at any time within five years of 1 July 1971.

International air operations are permitted only after an agreement has been negotiated with the Australian Government.

Lists of aerodromes, the routes operated, types of aircraft, the frequency of services and other aviation information are given in Appendix XV, Tables 7 and 8.

*Fares and Freight Charges.* Tariffs for the carriage of passengers and cargo on scheduled services are set out in the operator's published timetables.

*Training of Papua New Guinean Pilots.* Flying scholarships, administered by the Department of Transport, are offered annually to train indigenous pilots to the standard of the commercial licence. Funds for the scheme are provided by the Australian Government. Two graduates are employed as First Officers in F27 Fokker Friendship aircraft by Ansett Airlines of Papua New Guinea. A third is a flying instructor employed by the South Pacific Aero Clubs where a course for 9 students is in progress. A course for 12 students is planned to commence in January 1973.

*Investments.* The Australian Department of Civil Aviation investment in fixed assets at 30 June 1972 was estimated as follows:

|   | Papua     | New Guinea |
|---|-----------|------------|
|   | \$        | \$         |
| Airways Facilities ..                       | 1,413,022 | 1,982,141  |
| Buildings ..                                | 2,833,056 | 2,121,346  |
| Runways, Taxiways and other Improvements .. | 5,356,271 | 5,304,290  |
| Total ..                                    | 9,602,349 | 9,407,777  |

During 1971-72 expenditure by the Department of Civil Aviation was as follows:

|                        | Papua     | New Guinea |
|------------------------|-----------|------------|
|                        | \$        | \$         |
| Capital Expenditure .. | 932,216   | 337,880    |
| Maintenance ..         | 1,101,605 | 1,396,610  |

Capital investment by airlines, mainly of Australian origin, is substantial, as indicated in the following table:

|   | Papua     | New Guinea |
|---|-----------|------------|
|   | \$        | \$         |
| (i) Commonwealth Investment through the Australian National Airlines— |           |            |
| Commission (TAA)  | 830,328   | 11,114,958 |
| Private Investment  | 4,664,000 | 2,985,000  |
| (ii) Investment in fixed assets—                                      |           |            |
| T.A.A. ..   | 828,328   | 9,588,232  |
| Others ..   | 2,818,000 | 2,943,000  |

*Subsidies.* No subsidies are granted to airlines or charter operators in respect of their operations.

*Additional Information.* There are 14 locations where navigational aids have been installed to date. Operating within Papua New Guinea are 240 aircraft comprising 25 types and current regional pilot strength is 685.

#### *Ports and Facilities*

The Papua New Guinea Harbours Board is responsible for the ports of Port Moresby, Samarai, Rabaul, Lae, Madang, Kavieng, Kieta, Wewak, Kimbe and Oro Bay. At the latter three ports, overseas wharves have recently been commissioned. Lorengau may be handed over in the near future, as will Alotau when construction is completed.

The port development study of Madang was completed last year as was a study of port dues and charges. An investigation of cargo clearance procedures was also undertaken.

A loan from the International Development Association for \$US9.2m for major port extensions was concluded. This provides for a 600 ft extension to the Lae wharf with corresponding shore facilities, a coastal facility and improvements at Kieta, a combined overseas and coastal facility at Alotau and the reclamation of three acres and construction of a transit shed at Port Moresby; in addition the loan provides for consultant services, training and equipment.

Other major works include a coastal wharf complex at Lae nearing completion, rehabilitation of Kavieng wharf to be completed by the end of 1972, additional covered storage at Lae and new coastal facilities at Madang.

Expenditure on capital works by the Harbours Board during 1971-72 amounted to \$384,000, the programme being restricted pending the outcome of negotiations with the World Bank.

*Shipping Services.* Cargo liner services operate between Papua New Guinea ports and Australia, New Zealand, Nauru, B.S.I.P., Japan, Hong Kong and Singapore. Passenger-cargo vessels provide regular services to Australia and ports in Far East Asia; an increasing number of overseas cruise ships call at main ports in Papua New Guinea.

Overseas tankers provide direct services to Port Moresby, Lae, Madang and Rabaul, and



the smaller centres are supplied by coastal tankers. Similarly, liquefied petroleum gas tankers service the main centres.

Coastal vessels (ranging in size from 1,000 GRT to 5 GRT) provide cargo and limited passenger services between numerous plantations and missions and the main ports.

*Lighthouses.* There were 76 lighted navigational aids in Papua New Guinea at 30 June 1972. Three additional lights were constructed in 1971-72. In addition, there were 160 unlighted (day) beacons of which 97 were maintained and 63 by the Australian Department of Shipping and Transport.

#### *Meteorological Services*

The Australian Bureau of Meteorology provides meteorological services throughout Papua New Guinea under the *Meteorology Act 1955*. The Bureau is a branch of the Department of the Interior and the Director of Meteorology is responsible to the Minister of that department.

Services include the provision of forecasts for aviation, shipping, and public interests and the provision of weather reports and statistical climatic data. Emphasis has been given in the past in Papua New Guinea to the support of the aviation industry, reflecting the importance of air communications in the country. Other activities are being rapidly expanded in order to provide an independent country with a well balanced and efficient service.

The Papua New Guinea subregional office of the Bureau of Meteorology operates under a Chief Meteorologist. The main forecast office is situated at Port Moresby and other offices are at Lae, Madang, Rabaul, Manus, Kavieng and Kieta. Non-Bureau personnel also furnish weather observations from 45 other locations and rainfall reports are received from about 350 points.

A training school for Papua New Guinean meteorological staff is located at Port Moresby and rapid progress in the replacement of expatriates by local officers is being made.

A summary of general climatic conditions may be found in Part I, Chapter 1, and climate statistics for Port Moresby, Lae, Madang, Rabaul, Mount Hagen and Kieta appear in Appendix XXIV.

## CHAPTER 10

### COMMUNICATIONS

#### *Ministerial Responsibility*

During the year under review the Papua New Guinea Government exercised full authority and final responsibility in relation to all postal, telephone, telegraph and telex services in Papua New Guinea. The Administering Authority retained responsibility for International Telecommunications and for the allocation of broadcasting frequencies.

The Ministerial Member for Posts and Telegraphs in the Second House of Assembly was Mr Sinake Giregire, MHA. The Minister for Posts and Telegraphs in the Third House of Assembly is Mr Kaibelt Diria, MHA.

#### *Department of Posts and Telegraphs*

The functions of the Department of Posts and Telegraphs are to provide and maintain postal and telecommunication services throughout Papua New Guinea.

Postal Services include all matters relating to the establishment, operation and management of Post Offices, mail services and money order transactions.

Telecommunications Services include the provision, maintenance and management of telephone, telegraph, telex and outstation radio services.

These are provided under the Posts and Telegraphs Ordinances of Papua and of New Guinea.

The Department also maintains equipment for the operation of Government broadcasting stations throughout Papua New Guinea as well as speech translation and recording systems for the House of Assembly.

#### *Postal Facilities*

A full range of mail and postal services (except for house to house delivery by postmen) is provided.

Mail is delivered by means of private bags, Post Office boxes and poste restante. At 30 June 1972 there were 13,404 Post Office boxes and 405 private mail bag services in operation, (10,574 and 347 respectively at 30 June 1971).

Facilities are available for the registration of articles, insurance of parcels to certain overseas countries, transmission of articles both

by air and surface means of transport and a cash on delivery parcel service within Papua New Guinea.

A complete list of Papua New Guinea Post Offices is at Appendix XV, Table 1. During the financial year 1971-72, the following Post Offices were opened:

- Arawa—7 July 1971
- Waigani—12 July 1971
- Okapa—1 October 1971
- Kukipi—20 October 1971
- Abau—8 June 1972

The number of postal articles handled is stated in Appendix XV, Table 2.

*Carriage of Mail.* Airmail services with Australia operate to and from Brisbane, Sydney, Melbourne and Canberra daily and to and from Townsville and Cairns 4 times a week. Airmails are also exchanged with Hong Kong 3 times weekly. In addition, airmail dispatches are made to the United Kingdom and Japan thrice weekly and to Singapore once a week. Other international airmail services are in operation to and from Jayapura (West Irian) once fortnightly and Honiara (British Solomon Islands Protectorate) 4 times weekly.

Within Papua New Guinea, mails are conveyed principally by aircraft but coastal vessels and motor vehicles are also used. The larger centres exchange mail daily. Outlying areas are served by means of light aircraft operating from the main towns.

Surface mail is conveyed to and from Australia by ship at approximately weekly intervals.

Direct surface mail parcel dispatches are made to Papua New Guinea from Hong Kong, the United States of America, New Zealand and the United Kingdom.

*New Issues of Postage Stamps.* The Department's policy is directed to meet specific postal requirements. A secondary aspect of this policy, however, is to use postage stamps as a means of publicising Papua New Guinea, its people and their customs as well as indigenous flora and fauna in overseas countries. In this latter context the department endeavours to issue stamps which are both aesthetically pleasing and also of interest to all classes of philatelists. The success of this policy has been demonstrated by the steadily growing volume of sales to overseas customers.

During 1971-72 5 new issues were made. These featured agricultural and trading methods practiced in Papua New Guinea, Papua New Guinean dancers in traditional costumes, the 25th anniversary of the South Pacific Commission and a concurrent issue commemorating constitutional development which featured the Papua New Guinea flag and emblem respectively.

#### *Telecommunications Services*

*Telephone and Radio Telephone Services.* With minor exceptions, all internal telephone and radio telephone services are owned and operated by the Papua New Guinea Government. At the present time all external circuits are owned and operated by the Australian Overseas Telecommunications Commission.

*Telephone Rates.* Rentals for exclusive telephone services are as follows:

For metered services connected to exchanges with direct dialling access:

|                            | Per<br>Annum<br>\$ |
|----------------------------|--------------------|
| Up to 2,000 subscribers .. | 26                 |
| Over 2,000 subscribers ..  | 39                 |
| The unit fee is 7 cents.   |                    |

Unmetered exclusive telephone services connected to exchanges serving:

|                               | Per<br>Annum<br>\$ |
|-------------------------------|--------------------|
| Up to 100 subscribers—Private | 39                 |
| Business                      | 65                 |
| Over 100 subscribers—Private  | 52                 |
| Business                      | 91                 |

Local calls are free.

*Trunk Calls*—from subscribers connected to exchanges which have Subscriber Trunk Dialling (STD) access:

|   | \$   |
|---|------|
| Within the same charging area per 36 seconds .. .. .  | 0.07 |
| To an adjoining charging area per 18 seconds .. .. .  | 0.07 |
| To other places in Papua New Guinea per 12 seconds .. | 0.07 |

*Trunk Calls*—manual assistance where the Zone Centre is connected to the STD system:

|   | \$   |
|---|------|
| Within the same charging area per 3 minutes .. .. . | 0.50 |
| An adjoining charging area per 3 minutes .. .. .    | 1.00 |

Manual assistance where the Zone Centre is not connected to the STD system:

|   |      |
|---|------|
|   | \$   |
| Within the same charging area per 3 minutes .. .. . | 0.30 |
| To an adjoining area per 3 minutes                  | 0.60 |
| Elsewhere per 3 minutes .. .. .                     | 0.90 |

*Outstation Calls—(HF and VHF Services):*

|   |      |
|---|------|
|   | \$   |
| Within the same charging area per 3 minutes .. .. . | 0.30 |
| To an adjoining area per 3 minutes                  | 0.60 |
| To other places within Papua New Guinea .. .. .     | 0.90 |

*Particular Person Fees—(applicable only to manually operated exchanges, manually assisted trunk line calls and outstation calls (HF and VHF services):*

|   |      |
|---|------|
|   | \$   |
| Within the same charging area ..                | 0.30 |
| To an adjoining charging area ..                | 0.60 |
| To other places within Papua New Guinea .. .. . | 0.90 |

*Overseas Trunk Calls to Australia:*

|                    |      |
|--------------------|------|
|                    | \$   |
| Per minute .. .. . | 1.25 |

(There is a 3-minute minimum charge)

The year 1971-72 was the fourth of the 5-year development programme which is being undertaken with the aid of financial assistance from the International Bank for Reconstruction and Development. A further loan of \$US10,000,000 covering the period 1972-75 was also negotiated with the IBRD during March 1972.

The scheduled date for completion of the programme works financed by the initial loan is now 31 December 1972.

Subscriber Trunk Dialling (STD) facilities were extended to Panguna, Kieta, Finschhafen, Arawa, Port Moresby, Boroko, Konedobu, Kokopo and Kerema telephone exchanges. It is proposed to have Goroka, Kundiawa, Kainantu, Madang, Mount Hagen, Mendi, Banz, Minj, Wewak and Vanimo all included in the STD network by early 1973.

Manually assisted trunk line calls originating within Papua New Guinea in 1971-72 decreased from 496,861 in 1970-71 to 357,000 as a result of the extension of STD facilities. Metered calls, including trunk line calls made by means of STD, totalled 18.5 million compared with 13.8 million in 1970-71.

Major telephone exchange works completed were:

- Arawa—Installation of 1,000 line automatic exchange.
- Boroko—1,000 line (to 4,000 line) extension to automatic exchange.
- Boroko—Installation of tandem exchange.
- Finschhafen—Installation of 100 line automatic exchange.
- Goroka—Installation of 1,000 line automatic exchange.
- Kainantu—Installation of 200 line automatic exchange.
- Kerema—Installation of 100 line automatic exchange.
- Kieta—Installation of 400 line automatic exchange.
- Kundiawa—Installation of 200 line automatic exchange.
- Madang—200 line extension (to 1,000 line) to automatic exchange.
- Mendi—Installation of 200 line automatic exchange.
- Mt. Hagen—Installation of 1,000 line automatic exchange.
- Nairobi—Installation of 200 line automatic exchange.
- Panguna—Installation of 330 line automatic exchange.
- Popondetta—Installation of 200 line automatic exchange.
- Waigani—Installation of 400 line automatic exchange.

Other major telecommunications works completed in 1971-72 were:

- Port Moresby-Lae—Micro-wave bearer.
- Port Moresby-Daru—4 channel ISB HF radio system.
- Goroka-Kainantu—2 x 5 channel VHF radio system.
- Goroka-Kundiawa—2 x 5 channel VHF radio system.
- Mt. Hagen-Mendi—2 x 5 channel VHF radio system.
- Mt. Hagen-Banz—2 x 5 channel VHF radio system.
- Lae-Finschhafen—2 x 5 channel VHF radio system.
- Mt. Lawes-Popondetta—2 x 5 channel VHF radio system.

Mt. Lawes-Kerema—2 x 5 channel VHF radio system.

Mt. Lawes-Tapini—1 x 5 channel VHF radio system.

Wewak-Maprik—1 x 5 channel VHF radio system.

Tomavatur—HF Receiver Station.

Port Moresby-Lae—2 x 5 channel VHF radio system.

Kainantu—Arona Hydro scheme subscribers cabling.

Details of services provided together with traffic statistics are shown in Appendix XV, Tables 3, 4, and 5.

Buildings completed during 1971-72 were: Daru—Telephone Exchange, Post Office and Telegraph Office Complex.

Kimbe—Telephone Exchange, Post Office and Telegraph Office Complex.

Mt Hagen—Telephone Exchange, Post Office and Telegraph Office Complex.

Lorengau—Telephone Exchange, Post Office and Telegraph Office Complex.

Alotau—Telephone Exchange and Post Office Complex.

Namatanai—Telephone Exchange.

Maprik—Telephone Exchange.

Popondetta—Telephone Exchange.

Kerema—Post Office.

Alotau—Transmitter-Receiver Station.

Lorengau—Transmitter-Receiver Station.

Buildings commenced during 1971-72 and due for completion in 1972-73 are:

Lae—Telephone Exchange.

Wewak—Post Office and Telephone Exchange.

Wewak—Line Depot.

Goroka—Line Depot.

Kainantu—Telephone Exchange, Telegraph Office and Post Office Complex.

Rabaul—Telephone Exchange and Telegraph Office.

Goroka—Telephone Exchange, Telegraph Office and Post Office Complex.

Vanimo—Telephone Exchange, Telegraph Office, Post Office and RX building.

Boroko—Line Depot earthworks.

#### *Planned Telephone Development*

Telephone subscribers increased by about 13.7 per cent during 1971-72. Expansion at approximately the same rate is anticipated in 1972-73.

A manual Gentex telegraph and telex system will be introduced during the coming year. This system will be converted to automatic operation during the period 1973-75.

*Work scheduled to be commenced, continued and/or completed during 1972-73:*

Exchange Provision, Development and Associated Works—

(i) Wewak—ARF conversion.

(ii) Lae—Install 4,000 line exchange.

(iii) Rabaul—Provide 2,000 line extension.

(iv) Boram—ARF conversion.

(v) Vanimo—Install 200 line automatic exchange.

(vi) Toleap—Provide 130 line extension.

It is intended that major cabling and subscriber reticulation works will be carried out at Lae, Goroka, Arawa, Madang, Mt Hagen, Port Moresby, Rabaul and Wewak.

*Planned Trunk and Telegraph Development:*

It is planned to install a 720 line automatic Telex Exchange at Lae.

*Trunk and Junction Route Projects:*

| <i>Item Description</i>                            | <i>No. of Channels</i> |
|--|------------------------|
| (i) Lae-Goroka Micro-wave .. ..                    | 60                     |
| (ii) Goroka-Madang Micro-wave .. ..                | 60                     |
| (iii) Goroka-Mt Hagen Micro-wave .. ..             | 60                     |
| (iv) Port Moresby-Alotau HF ISB .. ..              | 4                      |
| (v) Lae-Lorengau HF ISB .. ..                      | 4                      |
| (vi) Tomavatur-Kavieng Tropospheric Scatter .. ..  | 12                     |
| (vii) Wewak-Vanimo Tropospheric Scatter .. ..      | 15                     |
| (viii) Mt Hagen-Wewak 2 x 24 Chl. .. ..            | 48                     |
| (ix) Lae-Rabaul-Arawa Capacity Increase from .. .. | 60 to 240              |

#### *Radio Broadcasting Services Projects*

*Works completed in 1971-72:*

Goroka—Power increase from 250 watts to 2 kW.

Mt Hagen—Power increase from 250 watts to 2 kW.

Kerema—Power increase from 250 watts to 2 kW.

It is proposed to increase power at Alotau from 250 watts to 10 kW and provide new services at Mendi, Kundiawa, Kavieng and Popondetta during 1972-73. (A description of broadcasting services in Papua New Guinea is found in Part VIII, Chapter 8).

### *Training*

The residential Training College at Port Moresby continued presentation of courses providing for a variety of Papua New Guinea Government careers.

During 1971-72, 2 students qualified for appointment as Technician (Radio); 13 for Technician (Services); 11 as Linesmen; 44 as Communications Officer Grade 1; 39 as Communications Officer Grade 2; 9 as Postmaster Grade 1; 17 as Postal Officer Grade 4 and 19 as Postal Officer Grade 3. Four officers from the Post Offices Branch also completed a 6-month course covering advanced postal management including inspection and audit procedures.

Courses in progress at 30 June 1972 and trainee enrolments therein were Technician-in-Training (2); Technician (Services) (20); Linesmen-in-Training (13); Postal Officer Grade 2 (12); Communications Officer Grade 4 (16); Radio Telephone Operators (for the Overseas Telecommunications Commission) (7).

Two Papua New Guinean officers successfully completed a 2-year Traffic Officer training course with the Postmaster-General's Department in Australia.

During the year, 9 Papua New Guinean officers received training for periods varying from 5 weeks to 6 months with the Postmaster-General's Department in Australia under the auspices of the Commonwealth Practical Training Scheme.

## CHAPTER 11

### DEPARTMENT OF PUBLIC WORKS

#### *Ministerial Responsibility*

The Minister exercised full authority and final responsibility in all the areas listed below in the functions of the Department of Public Works. The Administering Authority retained responsibility for the Supply and Tender Board during the period of this Report.

In the Second House of Assembly the Ministerial Member for Public Works (and Mines) was Mr O. I. Ashton, MHA. In the Third House of Assembly the Minister for Public Works is Mr Thomas Kavali, MHA.

#### *Role of the Department*

The present function of the Department of Public Works are as follows:

- The designing, estimation, construction, supervision and certification of payment

for all architectural and engineering behalf of the Papua New Guinea Government.

- Calling of tenders and letting of contracts for capital works and maintenance.
- Holding of Instruments of Authorisation for all aerodromes owned by the Papua New Guinea Government.
- Carrying out and/or supervision of all technical investigations, feasibility studies and surveys necessary for proper consideration of future engineering and architectural works, including rural development works.
- The provision of technical advice and liaison with other departments of the Papua New Guinea Government, outside instrumentalities and others, on architectural and engineering works.
- The charging of fees for work performed on behalf of outside authorities.
- Technical and other training of men and women to fit them for employment by the Works Authority, including students nominated by other bodies to courses primarily for Works personnel.
- Research into materials and methods associated with construction.
- Management of engineering services not controlled by Local Government bodies; technical assistance to Council's Municipal Commissions, and like bodies by way of training, loan of skilled manpower and a consultant service on those which are so controlled.
- Assessment and supervision of the utilisation of the water resources of Papua New Guinea.
- Operation of Appeals Tribunal (Building Regulations).
- Administrative arrangements for Building Boards.

*Legislation Administered by the Department Building Ordinance 1971;*

*Port Moresby Water Supply Ordinance 1961-67;*

*Water Resources Ordinance 1962-71.*

#### *Policy Aims*

The department is essentially a service department with its chief policy aim being the successful execution of the Capital Works Programme and maintenance of the Government assets.

### *Administrative Structure*

The formal organisation is divided into Executive-Design/Construction; Technical Services; Finance and Administration and Water Resources Divisions. Day to day functioning, however, tends to establish more discrete units, namely Executive; Roads and Bridges (Design); General Engineering (Design); Architectural (Design); Construction (which manages all day labour projects in the field); Technical Services (which includes training, local government engineering and architectural advice); Plant and Mechanical; Finance and Administration; Projects and Planning and finally, Water Resources. The department has accepted the concept of project orientation and contract supervision in the field is undertaken by the relevant design body at headquarters.

The department employed 9,579 staff at 30 June 1972 broken into 696 overseas officers, 2,647 local officers and 6,236 semi-skilled and casual labour.

*Activities by Division.* The Executive is the top management group in the department with its chief responsibility to secure and maintain efficient departmental operations, and to formulate and implement new policy proposals, and to evolve policy to meet the requirements of national development.

*Roads and Bridges Division.* The division is responsible for the technical investigation and design of all road and bridge engineering works for the Government within the constraints of the Design List and Works Programme provisions. In November 1971 in line with project orientation, the division became responsible for the administration of all contracts let by the department for the construction of roads and bridges. It is also responsible for the development of standards for design and construction for roads and bridges appropriate to the needs of Papua New Guinea.

The division consists of a road design section, a project design section, and a drafting section. During the year there was an average strength of 9 professional expatriate engineers, 10 expatriate draftsmen and 11 local officers in the drafting section of whom 4 have completed basic training in drafting.

Consultants are given a very significant part of the work load of the division, and have carried out some important engineering investigation survey and design of engineering works for the year under review. In October

1971 an agreement was entered into with a firm of consulting engineers for them to carry out the detailed engineering investigation survey, design and the preparation of contract documents for a section of the proposed Madang-Kundiawa road of about 115 kilometres in length. In addition, the consultants were required to review the economics of the whole road from Madang to Kundiawa.

The economic review which was submitted in March 1972 was subject to examination by the Papua New Guinea Government, and a mission from the International Bank for Reconstruction and Development, and the conclusions drawn were that the project was expensive and not viable at present. The Bank has indicated that it would be prepared to re-consider the project in about 1978 if approached with a request for Bank finance. The Papua New Guinea Government has decided accordingly not to proceed with the project at present.

The Snowy Mountains Engineering Corporation which was commissioned in May 1971, to rephrase the Flood Estimation Manual of the Department, has made excellent progress on the study; broadly, the study is in four parts—namely, rainfall analyses, regional flood studies, a study of rational method of flood estimation and unit hydraulic methods. Daily rainfall data from 116 stations throughout the country have been analysed, together with the stream discharges at approximately 60 flood gauging stations. The work should be completed during 1972-73.

The field work necessary for the updating of the Department's road and bridge inventory was carried out during July 1971. Collecting of the data and the preparation of the necessary maps was nearing completion at the end of the year. Publication of the information is expected prior to the end of 1972. The 1967 Road Inventory did not include many of the lesser roads. In particular, minor village roads and a number of location errors occurred. The new inventory has endeavoured to overcome these deficiencies.

The division has assisted in the preparation of technical data on projects under consideration for financial assistance by both the Asian Development Bank and the International Bank for reconstruction and development. Divisional officers participated in field inspections and conferences with both agencies.

*General Engineering Division.* The division operates in 5 distinct sections—Hydraulics,

Aerodromes, Structural, Wharves and Mechanical, the latter being divided into Electrical and Mechanical Works.

During the year a major change was made in the technique of training engineering draftsmen, involving the introduction of a specific officer to overlook and advise on their working progress. Sixteen of the 17 Papua New Guinean technical officers presently working in the division are undertaking training. Each has been provided with an individually tailored training programme, suitable to his particular speciality, whilst providing at the same time a comprehensive background to the department's role in the affairs of the country.

*Wharves Section* designed and documented the re-construction of the Kavieng wharf for the Papua New Guinea Harbours Board, and supervised such reconstruction. The port study for P.A.I.A. in the Gulf district was carried out for the proposed road outlet in the Southern Highlands district. Preliminary designs and reports on the development of Kieta and Alotau ports for the Harbours Board were made, and currently preparation of final designs and documentation is in progress. Design and documentation of the Aitape wharf and supervision of the Oro Bay wharf was done. This wharf is scheduled for completion in July 1972.

Modifications were carried out on the Kieta and Samarai wharf fender systems.

*Mechanical Sub-section* undertook designs and documentation for major works including the water supplies for Kimbe, Mendi and Kerema Hospitals, the air conditioning for the above hospitals, plus Housing Commission headquarters and Public Works Department headquarters extensions and sawdust extraction systems for Mendi, Madang, Wewak, Kimbe and Mt Hagen Public Works Department depots. Mechanical and electrical design staff attended the commissioning of airconditioning and fire alarm systems throughout the country. A borehole test pump was purchased and used in Mendi and Wewak areas for investigation purposes. A portable refrigerated 1,000 lb fish freezer mounted on skid rails was designed for the Department of Agriculture, Stock and Fisheries.

*Electrical Sub-section* forms part of the Mechanical/Electrical Design Section. During the year it dealt with over one hundred requests for electrical design, drawings, specifications or estimates. The bulk of these emanate from the architectural division, district officers of the Department of the Administrator and the Local Government Section, Department of Public

Works. Major projects included new hospitals at Mendi, Kimbe and Kerema; Public Works Depots at Kieta and Mendi; Government Stores complexes at Goroka and Kieta; Fire Stations at Goroka, Wewak, and Mt Hagen; and other work which included schools and extensions to schools, police stations, police barracks, housing, Government offices, post offices, radio stations, telephone exchanges, wharves, Department of Trade and Industry centres, fire alarm systems and cathodic protection of wharves.

The work of the *Hydraulic Section* consisted largely of investigation, design and documentation of water supply and sewerage schemes to Papua New Guinea Government institutions. Both water and sewerage systems were designed for 6, and water supply for 5 of these institutions. Final design and documentation of major improvement to the Popondetta water supply system was completed as was the new sewerage scheme for Kundiawa. Designs for sanitary depots for Mt Hagen, Vanimo and sanitary land fill garbage disposals at Port Moresby and Arawa were also completed. New investigation and or design work has commenced on 4 other institutions, a water supply for Wewak and reticulation extension at Alotau.

*Structural Section* provided considerable assistance to the Architectural Division and the Local Government sections in the design of buildings which require structural design work. The range provided by this service was extensive and ranged from block work and roofs for toilets to the structural framework for the Public Works headquarters new building. Most projects required design drawings and specifications, whilst many required design only. The section has commenced designing and documentation for site works and has completed several projects. Extension service has been provided for the Department of Posts and Telegraphs by designing erection facilities for the installation of parabolic reflectors on various towers throughout Papua New Guinea, as well as providing structural certificates for reflectors, mounting bars and towers.

During the year under review, the *Aerodrome Section* investigated and designed a number of aerodromes as improving and upgrading projects. Perhaps one of the most notable was Gurney for which a contract for upgrading has been let at a price of \$30,000. This aerodrome, along with Hoskins and a number of others, will eventually accommodate F27 (Fokker) aircraft, thereby improving the standards of air travel within the

country. Although it is planned that the DC3 aircraft will be phased out eventually, investigations are being carried out still regarding safety factors for this aircraft. Three aerodromes under examination are Bulolo, Kododa and Telefomin. Design for the extension of Kagamuga (Mt Hagen aerodrome) is in hand and this will allow greatly increased effective payload for aircraft operating into this portion of the Highlands. Investigations and designs are in progress for more than ten new aerodromes and plans have been completed for minor improvements to a further 15 existing strips.

*Architectural Division.* The internal organisation of the Architectural Division was rearranged in November 1971, to allow in effect, a dual organisation to cope with the considerable increase in workload. The Principal Architect assumed responsibility for all architectural works programme commitments for the regions based on Port Moresby, Mt Hagen, Mendi and Kundiawa, namely Central and the Western, Southern Highlands and Chimbu districts, together with responsibility for the Minor New Works section (which was transferred from Construction) and responsibility for the Quantity Survey section.

The Executive Architect, Mr L. J. Short, APTC, FRAIA, assumed responsibility for all architectural works programme commitments in the regions based on Lae, Madang and Rabaul, namely Morobe and Eastern Highlands districts, the Papua New Guinea North Coast, and Papua New Guinea Islands.

Each architectural section has assumed also, responsibility for contract administration in their respective regions. Documentation and/or construction of significant projects undertaken by the division during the period under review consisted of:

|   | \$      |
|---|---------|
| • Public Works Department.                      |         |
| Block E .. ..                                   | 174,000 |
| • Three Storey Office Block, Konedobu .. ..     | 107,000 |
| • Mendi Hospital, Stage 1 .. ..                 | 365,000 |
| • Radio Station, Popondetta .. ..               | 75,000  |
| • Radio Station, Mendi .. ..                    | 142,000 |
| • Technical College, Mt Hagen .. ..             | 233,000 |
| • High School, Wabag .. ..                      | 148,000 |
| • Police Station, Mt Hagen .. ..                | 114,000 |
| • Corrective Institution .. ..                  | 200,000 |
| • Agricultural Training Centre, Korn Farm .. .. | 186,000 |

|   |         |
|---|---------|
| • Silk Centre, Kargamuga .. ..              | 72,000  |
| • Radio Station, Mt Hagen .. ..             | 94,000  |
| • High School, Chuave .. ..                 | 226,000 |
| • Nurses Quarters, Goroka .. ..             | 145,000 |
| • Hospital, Kerema .. ..                    | 95,000  |
| • Post Office, Vanimo .. ..                 | 60,530  |
| • Police Station, Wewak .. ..               | 462,000 |
| • Fire Station, Wewak .. ..                 | 394,000 |
| • Post Office, Wewak .. ..                  | 179,188 |
| • High School, Stage 2, Aitape .. ..        | 205,190 |
| • Post Office, Lorengau .. ..               | 28,986  |
| • General Hospital, Kimbe .. ..             | 510,180 |
| • High School, Stage 3, Kimbe .. ..         | 101,070 |
| • Radio Station, Kimbe .. ..                | 113,100 |
| • Oil Palm Development—<br>Hoskins .. .. .. | 325,000 |
| • Radio Station, Kavieng .. ..              | 69,400  |
| • High School, Stage 1, Arawa .. ..         | 153,230 |
| • Technical School, Stage 1, Arawa .. ..    | 250,000 |
| • Police Station, Arawa .. ..               | 240,000 |
| • Landscaping, Arawa .. ..                  | 137,000 |
| • High School, Stage 3, Buin .. ..          | 44,700  |

The housing designs used for the programme were similar to the previous year—that is AR 23 and AR 20 types for high covenant and B10853 design for low covenant areas. In a number of locations sites were not available to allow calling of a number of contracts, and as a result tender target dates were not achieved in a number of instances.

Major non-works programme items for which the section prepared documentation included the Administrator's Executive Council building, the Maximum Security Block at Bomana, the Public Service Board building at Konedobu and a two-storey administrative headquarters building for the Papua New Guinea Housing Commission.

In addition, technical assistance was provided to an inter-departmental committee on the preparation of a number of brief and subsequent evaluations of submissions tendered by a number of developers interested in providing the Government with 184,000 square feet of office accommodation at Waigani, on a lease-buy-back basis.

Training of Papua New Guinean drawing staff continued during the year, and a supervisor draftsman was appointed to provide what amounts to full time supervision on a day to



day basis and three organised discussion/study sessions. Because of his membership of the Board of Building Studies, the Principal Architect is in a position to ensure that subjects of the Building Certificate course are orientated satisfactorily towards the needs of the architectural trainees.

The work of the department's Building Research Station continued through 1971-72 under reduced staffing. Apart from refinement and extension of long standing projects, such as brickmaking, endeavours were centred on the design of equipment and development of techniques for the manufacture of a cement bonded coconut fibre building board, capable of village or local government council production. Having arrived at what appears to be a satisfactory and economic board, a prototype structure has been erected and samples submitted to the Commonwealth Scientific and Industrial Research Organisation (CSIRO) Melbourne for testing and detailed examination.

In conjunction with the Department's Soil Laboratory and the resident CSIRO officer, a programme aimed at establishing comparative dimensional values for the various soils found around Port Moresby as a result of seasonal changes has been designed and implemented.

*Construction Division.* During the year changes were made in the top construction establishment at headquarters. As a result of the project orientation approach being adopted 'the three construction manager' system has been abolished in favour of one construction manager who is now responsible for day labour and maintenance activities throughout the nation. As mentioned elsewhere, responsibility for contract supervision has now been passed over to the various design division chiefs. The Mechanical section was transferred to the Division of Technical Services in order to clarify and streamline the line of communications between officers of the Mechanical and Construction Divisions.

In accordance with the policy of phasing out Australian departmental activity in Papua New Guinea, works functions undertaken by the Australian Department of Works in Rabaul were taken over by the Papua New Guinea Department of Public Works.

An active policy of localisation has been followed in the Construction Division and overseas artisans no longer are employed, except in a few specialist trades. As a corollary a number of local officers have been

promoted to the level of foreman and several have acted in works supervisory positions and are expected to be promoted to them in the immediate future.

Expenditure in the year under review has been the highest recorded by Public Works, but 100 per cent completion of the Works Programme was not achieved for a variety of reasons. One of the major problems over the years has been delay in the purchase of land for construction sites, and it is foreseen that this could be a continuing problem.

In order to foster the growth of Papua New Guinean small contractors, to provide a local contractor base, contracts have been let whenever possible to such enterprises. The Papua New Guinea Government has formulated selective tendering procedures which will give priority to Papua New Guinean contractors for capital works and maintenance contracts.

*Division of Projects and Planning.* Since the last report, a new division has been established with the department—the Division of Projects and Planning. This division has incorporated the sections of Major Projects, Planning and Contracts, and was created in February 1972.

A Management Consultant firm—P. A. Management Consultants, is currently assisting the Division to establish relationships, procedures and an organisation appropriate to its role within the department.

Methods of project planning, programming, expenditure and progress control procedures are being critically examined with emphasis being given to the following:

- (a) Relationship and means of communication between PWD and other departments concerned with the development and execution of the Works Programme.
- (b) Overall planning and programming of the department's work.
- (c) Programming of individual projects at headquarter's level.
- (d) Site planning at district level.
- (e) Progress reporting on the physical and financial progress of projects.
- (f) The size, status and organisation of the division required to carry out these functions.

During the period under review, the Contracts Section advertised 96 tenders and awarded 88 contracts for a total value of \$6,794,567.

The Contracts awarded were for Capital Works and Maintenance. Capital Works falls under two categories:

(i) Architectural projects including schools, hospitals, offices, radio stations, training centres and to a large extent high and low covenant housing. Twenty-two architectural contracts were awarded for a total amount of \$5,604,576.

(ii) Engineering works such as roads, bridges, airconditioning and refrigeration, water supply and sewerage, electrical works, wharves and airstrips. Ten contracts under this category were awarded for a total value of \$907,979.

Six maintenance contracts worth \$282,012 were awarded for roads, accommodation, airconditioning and refrigeration.

It can be seen that of 88 contracts let, eight were awarded to Papua New Guinean contractors. With the introduction of selective tendering, it is anticipated that 90 contracts totalling approximately \$1,000,000 will be let to local contractors during the 1972-73 financial year under this system, and it is expected that with the encouragement and assistance provided to local contractors through the scheme, they will be able to undertake construction of the accommodation programme in 2 or 3 years time.

*Arawa Township and Associated Development.* During this period, the development at Arawa proceeded at an accelerated pace. In August 1971, contracts were let for the construction of a High School, Technical School, Police Station and Barracks. Work also commenced on the Business Advisory Centre and combined with the other contracts let previously, the township commenced to take physical shape on the ground.

The following major development work was still outstanding at 30 June 1972.

- |                    |   |
|--------------------|---|
| (a) Court House    | } for which documentation is being prepared for tender by PWD staff |
| (b) Produce Market |   |
| (c) Public Toilets |   |

The contract sections of the Kieta-Tunuru Road were completed during the period. Some sections of the road designed by outside contract required modification and this work was undertaken by PWD staff. A close liaison was maintained between our project team staff and the contractor's representatives and delays were kept to a minimum.

An exceptionally heavy rainfall was recorded from August through to October

1971, and highlighted the drainage problem which made conditions for construction work far from ideal, on several projects.

The original drawings for the town centre did not include details of minor roads and walkways in the commercial centre. As the land had already been advertised and successful applicants were expected to occupy in the near future, a consultant was engaged to do the design work as a matter of expediency.

Under the terms of the construction agreement Bechtel WKE continued as a construction authority for Bougainville Copper Pty Ltd and the Papua New Guinea Government. The PWD Project Team continued to operate in its role of supervision of work, accepting completed work and liaison with all site representatives. To enable greater co-ordination of activities the project team office was moved into the renovated biological foundation building, together with the chief liaison officer, Department of the Administrator, and the newly created Arawa Municipal Commission.

By February 1972, it was considered that development had reached such an advanced stage that the responsibility for management of the overall project would revert to the respective PWD Design Division as a normal departmental function for technical and contract administration. Accordingly, the Major Projects Division was provisionally re-named the Projects and Planning Division. The role of liaison with the office of Programming and Co-ordination, Department of the Administrator, remained with the new division. In all, contracts to the value of \$15m have been awarded for Arawa and associated development. By February 1972, work had been completed to the value of \$13.7m.

*Highlands Highway.* Most of the establishment and preliminary work having been completed by the end of June 1971 work on the three contracts was in full swing at the beginning of the 1971-72 financial year.

In the early stages, the contractor concentrated on the Hagen to Togoba section of the contract TC201/005; on the Hagen to Kagamuga section of contract TC336/014 and from the Koromugl River to the Garnerig River on contract TC368/014; however, as additional plant and materials arrived on the work sites, the areas of work soon increased until work was in progress from Hagen to the Ankura River gorge, from

Hagen to Kudjip and from Kundiawa to Minj with the bridge work proceeding satisfactorily on each of the three contracts.

With the completion of the reconstruction and sealing of the highway from Mt Hagen to Kagamuga turn off, and from that point to the airport, a long standing source of agitation by all sections of the Western Highlands community was removed.

Disputes arose over the supply of river gravel which was necessary, for both the Hagen to Kudjip and Hagen to Togoba station construction.

There is provision in the contracts for an escalation in price due to awards of a statutory authority, in the wages or rates of wages or in the allowances or rates of allowances, including allowances for holidays payable for labour, or in respect of labour, or in the number of hours of work, if there is an increase in the ruling market price of such materials as have been stated in the contracts, or if there be an increase in freight rates and for insurance premiums. This has had the overall effect of increasing the contract prices as follows:

Contract TC201/005 from \$5,995,207 to \$6,884,664

Contract TC336/014 from \$2,732,283 to \$3,536,227

Contract TC368/014 from \$4,505,499 to \$5,811,807

(a total of almost \$3m during the year)

Progress has been made on all 3 contracts, and at the end of June 1972, the position on the contracts was:

| Contracts     | Expenditure to date | Percentage complete |
|---------------|---------------------|---------------------|
|               | \$                  |                     |
| TC 201/005 .. | 3,426,594           | 45                  |
| TC 336/014 .. | 2,725,381           | 80                  |
| TC 368/014 .. | 3,206,906           | 58                  |

*Division of Technical Services.* The Division is divided into 6 sections:

- Training;
- Plant;
- Local Government;
- Surveys;
- Materials Testing Laboratory;
- Building Secretariat.

In the course of the year former responsibilities for the Supply and Contract Section were handed over to the Assistant Director

(Finance and Administration) and to the Principal Engineer, Planning and Programming respectively.

The scope of duties of the Plant Section has been greatly widened. The Supervising Plant Engineer now takes full responsibility for all phases of activities of mechanical and electrical staff in the districts, and for all mechanical and electrical equipment owned by the department, including workshops.

*Training Section.* The Training Section is split into 3 groups:

- (a) Technical Training;
- (b) Administrative;
- (c) Clerical Training Staff Development.

Details of all courses held during the year may be found below.

*Technical Training.* Post trade courses were held during the year for building and mechanical trades. These courses proved a success, and it is expected that courses will be extended during 1972-73 to provide training for different levels of supervisory and trade staff in these trade areas. Courses were also held for building inspectors and foreman (general).

*Training of Plant Operators.* Courses were conducted throughout the year in the operation of the following plant:

- (a) Wheeled Tractor;
- (b) Dozer and Front End Loader;
- (c) Motor Grader.

The course members who completed the Wheeled Tractor course and who were considered competent were advanced to the Dozer Front End Loader Course, and also from the latter course to the Motor Grader Course after a period of field experience.

Training of professional staff is further limited, at present, to training of undergraduate staff. The department now has 16 trainee technical officers and 6 trainee draftsmen.

Training Officers have been appointed in each of the 3 Design Divisions, and there are officers responsible for training in other sections, such as Local Government.

The Department is sponsoring a number of students to certificate courses conducted by the Department of Technical Education. Numbers in 1972 were:

|                                   |    |
|-----------------------------------|----|
| Engineering Certificate Course .. | 45 |
| Building Certificate Course ..    | 25 |

Training of civil construction field staff was undertaken at a newly established training school at Oliguti in the Eastern Highlands. Courses commenced at the end of August 1971.

At 30 April the department had 425 apprentices in the trades of carpenter joiner, plumber, painter, bricklayer, wood machinist, diesel mechanic, fitter machinist, steel fabricator welder and refrigeration mechanic. These trainees attended block courses conducted by the Division of Technical Education, and received on the job training at various locations.

Induction courses were held throughout the districts and headquarters for newly recruited Papua New Guinean and expatriate officers. The purpose of these courses was to give the officers an idea of the department's role in the development of the country, and the course touched briefly on various aspects of the Public Service.

Fourteen trainees were selected to participate in the Commonwealth Practical Training Scheme. These officers spent an average of 6 months attached to Government departments and instrumentalities in Australia, thus gaining valuable insight into the activities and operations of other Works Departments.

Seventeen officers attended courses at the Administrative College or ASOPA during 1971-72. One officer is studying for his Diploma of Administration, and a total of 43 officers attended short courses held at the Administrative College.

Emphasis has been placed on higher education this year, and local officers have been encouraged to continue their studies through the College of External Studies. It is envisaged that the 1972-73 financial year will see an increase in the amount of courses held. However, this will be dependent on staff availability and establishment. Further information about the college may be found in Part VIII, Chapter 7.

*Plant Section.* Plant Engineering has in recent years assumed an increasingly important role in the successful operation of the Department of Public Works, and it was decided that as from 27 September 1971, Plant Engineering would be made a self-contained section with a Headquarters sub-section and Field Servicing section in regions and districts, all responsible to the supervising plant engineer.

The plant sections organisation is divided into 3 main activities:

- (i) Plant administration;
- (ii) Plant services;
- (iii) Institutional plant.

#### *Plant Administration*

- (a) Purchase of additional and replacement plant, and the disposal of obsolete plant.
- (b) Administration of the internal plant hire scheme.
- (c) Maintenance of plant and equipment records.

#### *Plant Services*

- (a) Control staff operating field workshops;
- (b) Arrange maintenance contracts for construction plant;
- (c) Maintain external plant hire register.

#### *Institutional Plant*

- (a) Arrange for the supervision of the installation and testing of mechanical and/or electrical projects in the field;
- (b) Control the inspection and maintenance of plant in Papua New Guinea Government buildings and institutions;
- (c) Arrange maintenance contracts for institutional plant.

Specialised on the job training has been given to apprentice mechanics at Rabaul (auto electrics) and Madang (diesel fuel pumps and injectors). Specialised training has also been given to plant attendants as follows:

Rabaul—(Nonga Hospital)—Boiler operation & maintenance & institutional engineering.

Arawa—(Hospital)—Boiler operation & maintenance & institutional engineering.

The Australian Department of Works ran a training course of 3 weeks duration at the Mt Eriama Water Supply Station on water treatment, and flouridation; one expatriate officer and one Papua New Guinean officer attended the course.

*Plant and Equipment.* Approval was given by the Papua New Guinea Treasury on 7 October 1971 for the establishment of a Permanent Board of Survey at Public Works headquarters, for the disposal of obsolete plant, machinery and equipment. The Board consists of the following members:

Chairman: Principal Engineer Technical Services, Department of Public Works.

Member: Chief Finance Officer, Department of the Treasury.

Member: Supervising Plant Engineer, Department of Public Works.

The first meeting of the Board was convened on 11 April 1972.

Replacement plant to the value of \$1,180,132 and additional plant to the value of \$256,762 was purchased during 1971/72. Funds for the replacement plant were made available from the depreciation reserves of the Plant Hire Trust Account and the additional plant by an appropriation from Treasury.

*Plant Maintenance.* Servicing of refrigeration and air-conditioning plant located in Administration property was taken over by the Australian Department of Works on 1 March 1972.

Plant maintenance expenditure incurred and/or controlled by the Plant Section falls into 6 categories as shown below:

| Categories  | Vote   | Project  | Value      |
|---|--------|----------|------------|
| 1. Maintenance of major and minor plant                       | PHTA   | 67- -002 | \$ 918,518 |
| 2. Workshops cons. including increase in spare parts holdings | PHTA   | 67- -001 | 379,100    |
| 3. Maintenance of non-hire plant                              | 32-1-6 | 67- -003 | 115,126    |
| 4. Maintenance of other departments plant                     | 32-1-6 |          |            |
| 5. Maintenance of refrigeration and air-conditioning          | 32-1-5 | 66- -001 | 100,885    |
| 6. Maintenance of hospital and institutional engineering      | 32-2-3 | 70- -001 | 229,711    |
| Total .. ..   | ..     | ..       | 1,743,340  |

*Plant Hire Trust Account.* The Plant Hire Trust Account has now been in operation for a period of two years. During 1971/72 financial year the computerised control ledger has been transferred from the IBM 1130 computer to the LCL 1902A computer. Some difficulties were experienced initially with conversion programmes, but these have been overcome. In addition, programming has been completed to transfer some Minor Plant Groups to Major Plant Groups, and for further Minor Plant Groups to be added to the computer ledger. These new programmes will be operating as from 1 July 1972.

*Local Government Engineering Section.* This report is set out under the headings of the different activities of the Section as follows:

1. Architectural;
2. General engineering and trainees;

3. Rural development roads;
4. Mechanical;
5. General.

*Architectural.* Requests for work increased during the year and the loss of a draftsman at the beginning of the year reduced considerably the ability of the section to action some requests in a reasonable period of time. It was necessary to select objectively those projects on which it was known councils had funds available and was waiting to commence. Problems were encountered during the year with the acquisition of suitable sites for council chambers, and resolving land matters became a time consuming problem. Towards the end of the year a Class II Architect joined the section to provide much needed assistance in the running of the section.

In the past year the construction section organised the construction of Henganofi Council Chambers, Rigo Council Chambers, Amazon Bay Council Chambers and Higaturu Council Offices with the council chambers well under-way plus numerous small markets, aid posts, etc.

A summary of projects undertaken in 1971/72 is as follows:

(i) Commenced and completed in 1971-72—13 projects, Total value \$199,000

(ii) Commenced construction, not completed—5 projects, Total value \$91,500

(iii) Projects documented, awaiting construction—16 projects, Total value \$195,500

(iv) Sketch plans drawn; awaiting approval to proceed with working drawings—nine projects, Total value \$421,000

(v) Requests received—sketch plans yet to be completed—21 projects, Total value \$848,000.

(vi) Not included in the above lists are standard housing classrooms, on which expenditure exceeds \$250,000 annually; neither are requests for assistance with squatter housing and anticipated request for assistance with Koki market re-development when political problems are resolved.

At the end of June 1972 10 trainee technical officers and 7 technical assistants were in the local government section. On an average, the trainees spent 3 months per year at the Lae Technical College, 2 months practical training on various plants, and the remainder divided between drawing

office duties and field supervision of council construction projects. In addition, 2 trainees were selected for further training in Australia with the Commonwealth Practical Training Scheme, and one had the opportunity to inspect engineering works in the United Kingdom and India during a 2-week trip.

During the year, the section continued to receive requests from councils for survey and design of bridges, water supplies and wharves. Engineers provided this service to councils by inspecting and surveying sites and issuing design drawing, cost estimates and materials lists for projects.

Where possible, supervision of construction was carried out by the field supervisors with assistance from the trainees.

Airfield maintenance agreements were arranged between Councils and the Papua New Guinea Government. This involved site inspection, cost estimate and documentation and administration of the contracts.

Projects surveyed and designed for councils during 1971-72 are summarised below:

1. Airstrip maintenance agreements—11
2. Wharves—10
3. Water Supply schemes—33
4. Bridges and River Crossings—63
5. Miscellaneous Projects—29

The miscellaneous projects included 14 culvert surveys, one road construction specification, 10 road inspections, one flying fox, one ford crossing repair and one raft design.

In addition, an engineer from the section assisted the Department of Lands, Surveys and Mines in the survey of village water supply requirements in the Southern and Eastern Highlands Districts.

At the end of June 1972 there were approximately 60 projects on hand, of which field inspection or survey had been done or were being done. The average waiting time for a project from a request by a council to its investigation is 6 to 9 months.

*Rural Development Roads.* Thirty-six surveys have been arranged and completed for various councils at an estimated cost of \$146,000. In 1970-71, 27 surveys at approximately \$90,000 were carried out. As there is still only one officer to handle this increase in work, time for follow-up action on these surveys is very limited.

The new Construction Manual for Rural Development Roads has been completed, and approximately 260 manuals have been forwarded to councils and other persons concerned with self-help roads.

East and West Sepik, Morobe, Madang, Chimbu and Southern Highlands Districts have been visited for the purpose of advising on road routes and construction methods.

*Methods.* A total of 91 councils were visited whilst 765 items of plant and vehicles were inspected. The approximate value of plant and vehicles owned by councils is \$2,000,000.

The following assistance and advice has been given to councils:

1. Plant and Vehicle unit arrangements with costing to cover increased council participation in road and airstrip maintenance, parks and gardens, sanitation and garbage.
2. Workshop repair and servicing arrangements.
3. Suitability of plant, vehicles and equipment for specified requirements and operations.
4. Arranging supply of spare parts where difficulties are being experienced by councils.

*General.* The Local Government Engineer has been acting as Secretary of the Central Roads Board since meetings commenced in April 1972, and has spent several weeks assisting with the preparation of regulations to be introduced under the Road Maintenance Ordinance. Councils will then become responsible for maintaining feeder roads in their areas, with Papua New Guinea Government grants.

There is a continuing shortage of staff in all sections to cope with the rapid increase in council requirements, particularly in the field supervision of rural development road works, and wastage of funds on these projects will continue at a high rate until the advising service, or the councils and Area Authorities themselves, can employ sufficient competent technical staff to supervise their construction and maintenance work.

*Surveys.* During the year the Section obtained additional drawing office space, and the installation of the photo co-ordinate plotter and a separate dark room area for map and

plan enlargement was provided. This houses the Artiscopex 3 enlarger and ancillary developing equipment.

Additional staff also enabled the first of the planned fully controlled road surveys to be executed; the first major task being completed was 60KM section Asaro-Kundiawa, for the proposed highlands highway upgrading.

Contoured base maps are now being used by Roads and Bridges Division, reducing the overall cost of surveys considerably, and allowing setting out work to proceed with accuracy from any point on the road.

Mr L. Tabua joined the staff on secondment from the Electricity Commission, and is the first Papua New Guinean graduate from the Institute of Technology to be so employed.

#### *Projects completed in 1971-1972*

##### (a) *Mapping 1:2500/1-2 metre Contour Interval*

*Towns*—Madang x 12 sheets; Goroka x 5 sheets

*Roads*—Goroka-Asaro; Daulo Pass; Chuave-Kundiawa; Kundiawa-Gumini

##### (b) *Control Surveys* (Other than for above) (2nd order traverse for road projects) 50KM

#### *Engineering Surveys* (Including Regional Survey Staff)

3 major setting out works (Roads) (continual) Total 80KM

46 Architectural sites

4 Bridge sites

6 KM sub-divisional roads

11 Aerodromes

31 miscellaneous drainage water sewage, wharf sites, etc.

#### *Land Surveys*

6 Boundary survey redefinition

51 Land matters, road purchases, P.W.D. sites, etc.

*Consultant Services.* In addition to the above works, some 83 briefs were issued to consultant surveyors, totalling \$458,000. Of these 33 (value \$147,000) were for rural development roads.

An additional 141 minor instructions totalling \$63,000 were also issued.

*Materials Testing Laboratory: Staff.* The section activities can be divided into field investigations and laboratory testing or engineering soils, concrete, and aggregates and some research into materials for building pur-

poses in association with the Building Research Section and the CSIRO.

About 75 per cent of the working man-days are directly occupied in soils testing in the laboratories, inclusive of the necessary supervision.

About 15 per cent of the time is taken up by investigations in the field of soils and concrete for construction purposes, and another 5 per cent of the available time is spent in the laboratories on tests related to concrete and its constituent parts, i.e. cement, sand and aggregate.

Research work of various types occupies another 5 per cent of total man-days to make up the full 100 per cent.

Engineering Certificate courses of 3 months duration were attended at the Lae Institute of Technology by 8 staff members.

*Building Secretariat.* The Secretariat has a staff of 17 building inspectors, located in various districts.

#### *Activities during year*

(a) Revision of the Building Ordinance and Regulations;

(b) Provision of technical advice to the 22 Building Boards of Papua New Guinea;

(c) Provision of secretarial services to the Central Building Tribunal;

(d) Holding of a training course of 2 weeks duration for all building inspectors;

(e) Arrangements for transferring responsibilities of building boards to local government councils.

#### *Finance and Administration Division*

The division provides a service to the department in the financial and administrative fields which covers staff, salaries, payment of accounts and receipt of credits for works performed for other departments or authorities; preparation of expenditure and bank reconciliation statements and financial estimates; staff matters generally, including conditions of service and discipline, organisation and methods, reviews and implementation; audit checks and investigations; provision of office support services including printing facilities, supply of stationery and equipment and finally, oversighting observance of various legislative requirements covered by ordinances administered by the department, also the Public Service and Treasury ordinances.

Additional trust accounts were established during the year to cover Works Services Outside Services (WSOS); Works Transferable

Cost Trust (WTCT); Overseas Officers Trust Account (OOTA); and the Overseas Officers Leave Trust Account (OOLTA). The financial year saw the highest ever sum of money being accounted for by this department under salaries, administrative and other services, maintenance and capital works.

Processing of actual salary adjustments reached and passed the 3,000 mark. A Papua New Guinean officer was appointed to be second in charge of salaries where supervisory skills of a high order and a detailed knowledge of the job is required.

The staff establishment of the department was increased by 194, and much activity in the establishment section revolved around the fourth annual review.

Recruitment for the year has been successful, particularly in respect of professional and sub-professional categories. In keeping with localisation policies, the number of expatriate staff has decreased by 35, and staff increases of Papua New Guineans have increased by 194.

In the Office Services Section the library has over a total of 4,500 publications. Ninety-two reports were registered during the year, and of these 63 were from the Roads and Bridges section. An up-to-date suppliers' index system is now maintained, and updated with new literature from suppliers each month. The department has seen a remarkable increase in printing requirements and the steady increase apparent in previous years has been maintained. It has been necessary to establish a small offset printing press to allow for a significant increase in this area, particularly with specifications supplied for works under the Works Programme. Seventy-five per cent of offset printing requirements is met from within the department itself. A plate-making machine has enabled speedier and more economical means of production.

With the building of a new office block in the next financial year, the master plan of access roads and parking bays has been pushed ahead, and there has been considerable work undertaken in establishing sealed roads, parking areas and tree planting.

The headquarters central registry is staffed now, completely by Papua New Guineans. The emphasis during the year in this area has been to cut down unnecessary circulation of correspondence, particularly before filing and marking out to the action officer.

All districts and regional offices have been visited on routine audit inspections, and

special investigations have been carried out at several centres. One officer has been occupied full time in examination of staff files.

The Supply Section has a review of systems and procedures at present underway with the active involvement of P.A. Consultants. The end aim is towards simplification of systems with the aim of achieving increased efficiency and to allow simplified and shorter training requirements for new personnel. Turnover of staff in this area was quite considerable, and competition for new staff against the needs of other sections remains considerable.

*Water Resources Branch.* The most important development over the past twelve months has been the gradual take-over of stream-gauging activities from the Australian Department of Works.

The move began in August 1971, when the Morobe District and the Papua New Guinea Islands Region were handed over 'in toto' to this Branch. Two Officers are regularly involved in the operation and maintenance of hydrographic installations. October 1972, will see the handover of the Goroka office and February 1973, the Port Moresby office; thus completing the takeover.

The Australian Department of Works (CDW) and this Branch have worked in close co-operation, and in February 1972, technical officers from Water Resources undertook familiarisation tours with CDW field parties of both the Central and Western Districts.

The proposed regular inspections of underground water control areas was seriously hampered, and had to be cancelled altogether through the staff shortage created by the transfer to Port Moresby of an engineer Class 3 and the loss of a technical officer to the Lae Technical College. This also affected the collection of water samples, although this was continued at irregular intervals throughout the year.

Investigations were made into possible water supplies for the Kainantu High School and the Tomaringa Police Station in East New Britain; the latter is not yet completed.

The airconditioned strongroom has been completed, but unfortunately will not be utilised for its original purpose as a result of the proposed transfer of this branch to Port Moresby in the near future.

A total of 120 waterworks licences have now been issued, and one investigation permit was approved this year to Kennecott Pacific Pty Limited.



## PART VII. SOCIAL ADVANCEMENT

### CHAPTER 1 GENERAL SOCIAL CONDITIONS

#### *Social and Religious Background and Traditional Papua New Guinean Customs*

Some information concerning the general social and religious background and customs of the Papua New Guinean inhabitants is given in Part 1 chapter 2 of this Report.

#### *Non-government Organisations*

Organisations, in addition to the various missionary societies which engage in work of a social nature, include the Red Cross Society, the Boy Scouts and Girl Guide Associations, the Country Women's Association, the Young Men's and Young Women's Christian Association, the Apex, Lions, and Rotary Clubs, the Junior Chamber of Commerce, the Port Moresby Community Development Group, ex-servicemen's organisations and various local social organisations including Papua New Guinean welfare societies, women's clubs, youth clubs and sporting clubs. Some of these organisations receive support from the Papua New Guinea Government in the form of annual grants-in-aid and *ad hoc* grants.

The Government receives many requests for financial assistance from non-governmental organisations and, because of these competing demands, some requests are refused. The appropriation for the grants is carefully allocated to ensure that emphasis is placed on continuing preventive and remedial social work and continuing activities.

A youth work organiser attached to the Department of Social Development and Home Affairs maintains liaison with non-government organisations in relation to their youth work, providing advice and assistance. In conjunction with this he has the task of stimulating and programming Government youth work.

Local social activities have been stimulated by the activities of Papua New Guineans and expatriate staff of the Division of Social Development in the Department of Social Development and Home Affairs through welfare centres and through their other activities in close contact with the people. As well as receiving active encouragement from the Government, local social organisations are often supported by local government councils.

Women's clubs, the promotion of which is described in Chapter 3 of this Part, are particularly well established.

The work of the missions and of the various societies listed above is referred to in the appropriate sections of this Report.

The popularity of sporting activities continues to increase and persons of all races in Papua New Guinea are competing together to an increasing extent. Soccer, rugby, Australian Rules football, cricket, baseball and basketball are the most popular games and strong associations have been formed in most of the main centres. Matches between the Papua and New Guinea regions are an annual event and participation in the South Pacific Games which were held in Fiji in 1963 and Noumea, New Caledonia, in 1966, has made competition much keener. Interest in track and field events is widespread and has led to improvements in training facilities and programmes.

The 3rd South Pacific Games were held in Port Moresby in August 1969. The 4th South Pacific Games were held in Tahiti in September 1971. The role of host nation in each case has instilled into the competitors a sense of national unity, and the influx of many differing nationalities into the country has led to a greater understanding of the peoples of the Pacific region. Interest and understanding have been further increased by participation in the First South Pacific Arts Festival in Fiji early in 1972.

Sports Development Boards have been established in all districts. They receive annual grants-in-aid from the Papua New Guinea Government which also makes funds available for basic engineering works needed to develop sports areas.

The Papua New Guinea Government continues to support voluntary effort by the provision of funds and equipment and by training programmes. Centres established for community education courses are used by a wide variety of organisations and societies, and recreation centres at most localities provide a meeting place for a number of groups such as sports bodies, women's clubs and youth groups.

Training in youth and sporting activities is given by major voluntary agencies such as the YMCA and YWCA, and courses have been

held by the Youth Work Organiser at Teacher Training Colleges and the Police Training College (Port Moresby). Local government councils have sponsored trainees for courses in the development and control of sports and these young men are forming teams and establishing playing fields throughout the council areas.

The Division of Social Development is conducting 3 centres for school leavers in Port Moresby. These are conducted with assistance from voluntary organisations and volunteer workers, and seek to establish and provide programmes which will meet the needs of the youngsters concerned.

## CHAPTER 2

### HUMAN RIGHTS AND FUNDAMENTAL FREEDOMS

#### *General*

All elements of the population are secure in the enjoyment of human rights and fundamental freedoms with no discrimination on grounds of race, sex, language or religion. It is still considered necessary, however, to retain certain legislative provisions in order to protect the interests of Papua New Guineans in such fields as land acquisition and employment, the latter being subject to the *Native Employment Ordinance* 1958-1968.

Freedom of thought and conscience and the free exercise of religious worship are enjoyed by all inhabitants.

The Declaration of Human Rights is expounded and explained in schools. As English is taught and used in the schools, the Declaration has not been translated into the numerous local languages, but for the benefit of those among the adult population who have not been to school, it has been translated into Neo-Melanesian (Pidgin).

The Human Rights Ordinance, passed by the House of Assembly in June 1971, was brought into force on 3 February 1972. It was designed to give protection under law to the fundamental rights of the citizens of Papua New Guinea.

The *Discriminatory Practices Ordinance* 1963-1969 requires the holder of any licence, permit or other authority which authorises him to buy, sell or deal or trade in goods—including the holder of a licence under the Liquor (Licensing) Ordinance and the Restaurants (Licensing) Ordinance—not to carry out, or

permit to be carried out, any discriminatory practice in connection with or incidental to the business, the subject of the licence. It also provides that no person shall on licensed premises act or incite another to act in an offensive or provocative manner towards a person of a different race or colour.

No important judicial decisions concerning human rights were made during the year.

#### *Slavery*

Slavery is expressly prohibited under the *Papua New Guinea Act* 1949-1971 and there are no institutions or practices analogous to slavery, or resembling slavery in some of their effects, in the country. Forced labour is prohibited under the Papua New Guinea Act except in special circumstances defined by the International Labour Organisation Convention concerning Forced or Compulsory Labour.

#### *Right of Petition*

The right of petition has been exercised occasionally for several years. Petitions have been addressed to the Administering Authority, the United Nations and, recently, the House of Assembly. The right to petition Parliament, an ancient right of address to the Parliament of England, has been adopted by the House of Assembly.

#### *Restrictions*

Subject to non-interference with the rights of other citizens there are no general restrictions on rights of assembly or the activity of any group or association. Indigenous inhabitants can move with complete freedom throughout Papua New Guinea.

The secrecy of correspondence is guaranteed under the Posts and Telegraphs legislation and the criminal law.

The House of Assembly has on several occasions debated the issue of freedom of movement of people, usually in conjunction with proposals to control migration to towns. So far no restrictions on movement have resulted, though the *Human Rights Ordinance* 1971 excludes freedom of movement from the list of fundamental freedoms it purports to protect.

The *Public Order Ordinance* 1970 permits restrictions on public meetings and processions in any specified area, if the Administrator's Executive Council considers peace and public order are endangered.

### *Freedom of the Press*

All people in Papua New Guinea possess the right of free expression of opinion. Printing presses must be registered and printers and publishers must make, and register with the Registrar-General, affidavits giving the correct title of any newspaper, description of the building in which it is to be printed, and the names and addresses of the proprietor, printer and publisher. They must also enter into recognisances with sureties as security for the payment of any penalty incurred by reason of anything published in the paper, or of any damages for libel. There is no censorship, and subject only to the law relating to sedition and libel, the Papua New Guinea Government does not exercise any control over the subject-matter of what is published in the Press.

### *Indigenous Religions*

The religious beliefs and practices of the indigenous people receive protection and consideration under the provisions of the law.

Legislation is levelled only at those magico-religious practices which are repugnant to the principles of morality and humanity. This matter is dealt with more fully under Part I of this report.

### *Missionary Activities*

No restrictions are imposed on missions or missionary authorities, other than such controls as are exercised for the maintenance of peace, order and good government. Further reference to missionary activities is made in the relevant sections of this report.

Information concerning the number of adherents is no longer collected. A question on this subject was not included in the Schedule used for the 1971 census.

The Papua New Guinea Government assists missionary organisations through financial grants-in-aid and a grant of supplies and equipment for their work in the fields of education, health and social welfare.

In order to ascertain the extent of the financial resources available to religious organisations, the Papua New Guinea Government compiled the data shown in Appendix XXV Tables 3 and 4. The data was obtained from questionnaires completed by religious organisations and supplemented by information from Administration Budgets and other official sources. The statistics do not include the operation of such non-secretarian, non-profit organisations as the YWCA, YMCA, Boy Scouts and Red Cross. To conform with

United Nations recommendations concerning a system of National Accounts and because non-market production is significant, the estimates of total income and expenditure include a valuation of items which are not actually bought or sold, e.g. gifts of food.

Because of difficulties of collection and the independent fund-raising activities of individual clergy, the statistics shown in these Tables should be regarded as approximations only and treated accordingly.

### *Adoption of Children*

Adoption of children in Papua New Guinea is now regulated by the *Adoption of Children Ordinance* 1968. Under the provisions of this ordinance the adopting parent or parents assume the same rights and responsibilities as if the child had been born to the adopting parent or parents in lawful wedlock. The ordinance applies uniformly to all races.

The customary adoption practices of Papua New Guineans are recognised by the Papua New Guinea Government. The *Adoption of Children (Customary Adoptions) Ordinance* 1969 provides for the recognition by a Local Court of customary adoption where the parties concerned desire such recognition. The court may issue a certificate either declaring that an adoption has been agreed to, together with the customary limitations or requirements at the time, or declare the termination of an adoption agreement. An adoption in accordance with custom is quite valid without any approach to the Local Court but the approach enables those concerned to have a record made of the adoption and to receive a certificate which is conclusive evidence of what was done. The Papua New Guinean people thus have 3 choices when seeking to establish a new relationship between adoptive parents and children. They may continue in the widespread practice of adoption by mutual agreement, they may seek recognition by a Local Court or they may proceed outside custom by application to the Supreme Court under the provisions of the *Adoption of Children Ordinance*.

### *Children Born Out of Wedlock*

The rights and status of Papua New Guineans born out of wedlock are determined by the customs of the community in which they live. To the knowledge of the Administering Authority no disabilities requiring legislative adjustment are placed on such persons in any community.

Expatriate persons born out of wedlock and not subsequently legitimated under the *Marriage Ordinance* 1963, which came into operation on 21 January 1965, are accorded the same civil rights and status as persons born in wedlock. In regard to private rights based on relationship, their position is distinguished, for instance, under the laws relating to devolution of property on intestacy.

#### *Immigration*

The control of immigration into Papua New Guinea is governed by the provisions of the *Migration Ordinance* 1963-1969.

All intending immigrants to Papua New Guinea are required to be in possession of a permit to enter there or a passport which has been specifically endorsed for entry there in accordance with the provisions of the *Migration Ordinance* and Regulations. No expatriate person has a prescriptive right of entry to the country. Any person who enters the country without a valid entry permit is, pursuant to section 6 of the ordinance, a prohibited immigrant. Further categories of persons deemed to be prohibited immigrants are specified in section 14 of the ordinance.

The Administering Authority adheres in its immigration policy to the main principles of the maintenance of a homogenous society. *Bona fide* visitors for holiday or business purposes who can satisfy normal immigration requirements of health and character and either possess a ticket to a destination beyond Papua New Guinea (or a return ticket), may be permitted to enter Papua New Guinea for a period appropriate to the purposes of their stay, but generally not exceeding 3 months in the first instance. This period may be extended upon application to the Administrator. Limited numbers of certain key professional and technical non-European workers required for essential enterprises may be permitted to enter Papua New Guinea for a period not exceeding two years even though these workers may not come within normal immigration categories.

As a general rule no person may enter Papua New Guinea for permanent residence unless he is eligible in similar circumstances to enter Australia for permanent residence. Normal immigration requirements of health and character must be met. The applicants must also lodge a landing bond (\$140) with the Papua New Guinea Government prior to entry and must have approved employment in

which to engage or show evidence of possessing sufficient funds with which to maintain themselves whilst there.

Figures for overseas departures are set out in Appendix XXVII.

#### *Elimination of all forms of Racial Discrimination*

Australia signed the International Convention on the Elimination of all Forms of Racial Discrimination in 1966. However it has not yet ratified the convention. Discussions are still continuing on the extension of the convention to Papua New Guinea.

The 1971 United Nations Visiting Mission found no real evidence of overt discrimination on racial grounds and it reported that, in the main, relations between the communities are relaxed and easy. It has, however, been considered inevitable that racial tensions will occur when considered against the background of Papua New Guinea's history and cultural differences.

Discrimination in shops and hotels and in the publishing, distribution or use in any public place of words or behaviour likely to stir up racial or sectional hatred are prohibited under the *Discriminatory Practices Ordinance* 1963-1969. Further amendments were made during 1972 to this ordinance so as to extend it to motor omnibuses, private hire cars, public motor vehicles, taxicabs, business finances, and any premises, vessel, aircraft or vehicle to which any license as defined in the ordinance relates.

Allegations of discriminatory practices are investigated by the Papua New Guinea Government.

The *Laws Repeal and Adopting Ordinance* 1921-1952 protects the tribal customs of Papua New Guineans so long as they do not violate recognised general principles of humanity. These customs are recognised and enforced as law under the *Native Customs (Recognition) Ordinance* 1963.

Racial harmony will be improved further with greater localisation of Papua New Guinea's manpower needs and the further involvement of Papua New Guineans in the country's development. Up to the present time there has been a great dependence on the manpower skills of Europeans and this has led to some of the differences and attitudes that exist. As Papua New Guineans assume more responsibility, and expatriates are progressively replaced, it is expected that any racial tensions and resentments will lessen.

The *Employment (Training and Regulation) Ordinance 1971* empowers the Administrator-in-Council to prevent new immigrants filling prescribed occupations and to declare that other occupations may only be filled by new immigrants if their employers undertake to train Papua New Guineans in the skills involved. On 1 June 1972 the Administrator's Executive Council gave notice of its intention to declare a wide range of unskilled and semi-skilled occupations prohibited or restricted under the legislation. The legislation does not apply to skilled immigrants, tourists or business visitors.

Objections may be lodged within 3 months of the notice of the intention after which time the Administrator-in-Council may consider any objections and finally declare certain occupations prohibited or restricted.

In August 1971 the Minister of State for External Territories also issued a document outlining policies on accelerated localisation and training.

While the above legislation attempts to deter acts of racial discrimination it is recognised that such actions are not necessarily prevented by legislation. The people of Papua New Guinea are encouraged to co-operate so that social separateness is minimised and racial harmony maximised.

### CHAPTER 3

## STATUS OF WOMEN

### *General*

The status of women in Papua New Guinea society varies according to social groups, and a woman's influence in social matters is governed to some extent by such local circumstances as whether she lives after marriage in her husband's village or that of her own group. Where inheritance of property is based on matrilineal descent the status of women may be higher than in patrilineal society. Generally women own and may inherit various forms of property. Women are not deprived of any essential human rights.

The status of women is rather higher in Papua New Guinea than first impressions sometimes indicate. In traditional society the roles of men and women were different and complementary, and neither might enter the preserve of the other. Politically, women's activity did not have the same degree of publicity as those of the men and local leadership

was nearly always confined to men. This was necessary in a society where warfare was an important function of leadership, but even then, the political system took women into account by means of discussions in the home and village, and their influence was not insignificant. With the elimination of warfare the traditional social system has remained, but is gradually being adapted to the new conditions. Local government legislation makes no distinction between men and women, so that the latter have the same responsibility to pay local government taxation as do men. It is a matter for each individual council when passing its tax rule each year to decide whether to set a rate for women and if so at what level. Women have the same rights as electors to local government councils as do men, and they have often stood as candidates for election. Women are included equally with men on the electoral roll for the House of Assembly. One woman was successful in being elected to the House in the 1972 general elections.

Where women appear to have a harder life than men this is largely because they live in areas where peace has resulted in the virtual disappearance of the roles of fighting, protection and weapon-making, which formerly took up a great deal of the men's time while there has been no corresponding diminution in women's work which is mainly directed towards the important tasks of food production and the care of young children. With the spread of education this disparity is being reduced, partly by men taking up paid employment, and partly through the expansion of cash cropping and other new forms of economic activity. That men in many areas now do less work than women is not generally a sign of an inherently lower status of women, but of the fact that the institutions of a traditional society take time to adapt themselves to sudden changes in surrounding conditions. The relative pace of advancement among women compared with men reflects the fact that it is the men who mainly go out to work and who in general have contact with more diverse and advanced Papua New Guinean and expatriate elements of the population.

Nevertheless, with the developments which are taking place in traditional society various changes are appearing in the attitudes adopted by and towards women. Perhaps the most significant reflection of the changing status of Papua New Guinean women has been the

extent of the interest shown in the establishment and successful operation of maternity hospitals, welfare clinics and women's clubs, and the increasing number of girls attending school and receiving vocational training. Not only are the clinics well attended but more and more women are showing a preference for having their children born in hospital. Papua New Guinean women working in their fields are developing high standards of skill. Others are undertaking full training as nurses and teachers and in other occupations. Women are taking an increasingly responsible part in local and central government elections; some have sought office; and some have represented Papua New Guinea at overseas conferences.

The rapid growth of towns is resulting in an acceleration of this process of emancipation. New housing settlements have tended to develop self-reliance and to free the urban dweller from time-consuming labours of house building and subsistence gardening. More time is spent in community groups such as women's clubs and welfare societies, and there has been a marked increase in the numbers participating in sport. Basketball and softball are popular with many hundreds of Papua New Guinea women and there is a growing number of multi-racial teams.

There has been a noticeable adoption of western habits of child care and dress. Employment as housekeepers, housemaids, seamstresses and shop assistants, and in offices, schools and hospitals, has helped accelerate this trend. The educational opportunities for girls have helped produce a marked degree of self-confidence and changes in many social practices. More and more girls are thought to be including educational attainment among considerations when seeking marriage partners. The various organisations for the advancement of women have produced an awareness of the political powers of women and this has also been stimulated by attendance of women at a number of overseas conferences.

#### *Marriage Customs*

The *Marriage Ordinance* 1963 provides that each marriage between Papua New Guineans which is in accordance with the custom prevailing in the tribe or group to which the parties to the marriage belong, shall be valid marriage. The ordinance also provides that a magistrate may order that such a customary marriage may not take place if the woman objects to it. Marriage otherwise than in

accordance with custom is regulated by this same ordinance. It provides that the minimum age for a marriage is 18 years for a male and 16 years for a female. A judge or magistrate may authorise the marriage of a male of 16 to 18 years or a female of 14 to 16 years to a particular person of marriageable age upon application if, in his discretion, the circumstances of the case are so exceptional or unusual as to justify the granting of the authorisation sought. The consent of both parties is required for the celebration of a marriage, and parental consent is required for the marriage of a person under the age of 21 years.

In Papua New Guinean society there is considerable variation from group to group in marriage customs, including the minimum age for marriage. Marriage is generally considered to be a matter affecting the family or clan as much as the parties concerned and the individual wishes of the latter are therefore not the only determining factors. Marriages are usually arranged by the parents in consultation with the future bride and groom and other relatives, and political, social and economic considerations are all taken into account before a betrothal is arranged. There are also recognised means whereby an engagement can be broken should either party feel strongly against it.

The system sometimes called 'bride price' is general throughout most of Papua New Guinea. The custom should more properly be known as 'marriage gifts'. It usually involves an exchange of gifts between the relatives of the bride and groom. It is not a 'purchase' of the bride but a recognition of the marriage and of a new alliance between the kinship groups of the parties concerned. The custom operates so as to provide a measure of social control lending stability to the marriage. In some areas, particularly those in which local government councils are operating, the people themselves have proposed the regulation and limitation of marriage gift transactions.

With economic, political, social and educational developments, and the spread of Christianity, emphasis is being shifted more and more towards individual choice in marriage, and in many areas young people refuse to consider any other factor. This sometimes leads to temporary instability as they often feel themselves at liberty to break off marriages by individual choice as readily as they contracted them, with little more reason than a minor domestic argument. This difficulty

will be overcome, however, as people gain greater familiarity with the new conditions.

Generally speaking polyandry is not practised. Polygyny is widely practised but its incidence is decreasing. It forms an integral part of certain traditional social systems which would be disrupted by its sudden prohibition. The only satisfactory method of reducing its incidence is by a gradual and fully integrated system of social change so that polygyny, as a preferred form of marriage tends to disappear as the structure of society changes, and livelihood, prestige and power are no longer based on the old norms. Another factor which makes careful handling of this matter necessary is the need to safeguard the rights of women who have entered into polygynous marriages and of the children of such marriages.

#### *Organisations for the Advancement of Women*

The main agencies for promoting women's activities have been the Papua New Guinea Government the Christian missions, the Girl Guides Association, and the Young Women's Christian Association. All conduct courses for the teaching of skills required in the home and in employment, at the same time encouraging acceptance of responsibility, and development of leadership.

The Country Women's Association in Australia, has continued to support the programme for the advancement of women in Papua New Guinea. In addition to liberal gifts of homecrafts training materials, and the 'adoption' of districts, for the purposes of assisting, and corresponding with clubs, they provide a scholarship to enable a young woman to train at the Community Education Centre at Suva. Six scholarship holders have completed their training so far, and a seventh began her studies in January 1972. Local branches of the Country Women's Association also take an active interest in sponsoring local groups.

Sixty-seven Community Development Officers, of whom 36 are local officers, work throughout Papua New Guinea. They are assisted by 11 Community Development Assistants, and by 34 trainee Community Development Officers. All Community Development Assistants and trainees, are local officers. These Community Development Officers and Assistants, foster women's groups, give particular attention to ways in which the whole family may be

involved in a club's activities, organise leadership training courses, cooking and sewing classes, and sporting activities, give special assistance to women in urban housing settlements, and visit female prisoners in corrective institutions. In addition, they carry out normal case work and counselling services.

Community Centres which are used for club meetings, instruction classes, infant and maternal welfare clinics, and recreation and other community activities, have been built in all districts.

There are approximately 830 women's clubs distributed throughout Papua New Guinea. The number of clubs is difficult to estimate, due to considerable fluctuations because new clubs are being formed and old ones becoming dormant. In the New Ireland District, the women's clubs have joined together to form a District Association of Women's Clubs. In East New Britain, a similar association was formed called, 'Nilai Ra Warden'. Other associations of women's clubs have been formed in Manus, Finschhafen, Madang and Mount Hagen.

The aims of the clubs are to raise village living standards through instruction in hygiene, nutrition, cookery, sewing, home nursing, and infant and maternal welfare, to provide leisure time activities (through new and old crafts, sports and social activities), and to help women improve their way of life, and provide them with a formal channel for the expression of opinions.

Formal courses are provided for welfare assistants and club leaders, from all parts of Papua New Guinea, at the training centre at Ahioma. All training courses deal with simple principles of group work, the functions of clubs, meeting procedure, work of office bearers, programme construction, programme content, cooking, sewing, child care, recreation, and the use of such aids as flannelgraphs. Selected trainees also attend the Community Education Centre at Suva, Fiji, which is conducted by the South Pacific Commission, in conjunction with the United Nations Food and Agriculture Organisation.

The training centre at Kundiawa in the Chimbu District completed its first course in 1971 and now has under way in 1972 a full academic year's course for welfare assistants sponsored by local government councils. The FAO expert in home economics attached to the centre last year has departed

and arrangements are in hand for a replacement who will be charged with developing a full programme of home economics training for Papua New Guinea.

## CHAPTER 4

### LABOUR

#### *Ministerial Responsibility*

During the year under review the Papua New Guinea Ministry for Labour exercised full authority and final responsibility in respect of Industrial dispute conciliation, industrial safety, health and welfare; licensing, inspection and technical advice on weights and measures, factories, boilers, packaging, explosives and flammable liquids; labour research; employment and advisory services; labour inspection; workers' compensation; trades licensing; industrial and commercial training courses; apprenticeship training scheme; worker education programmes and day-to-day advice and assistance to workers' industrial organisations; apprenticeship board; and the metric conversion board.

The Administering Authority retained responsibility for wages and industrial relations policy (private sector); localisation and training (private sector); and selective entry for employment.

Responsibility for labour matters was taken by Mr Toua Kapena, CBE, MHA, in the Second House of Assembly and Mr Gavera Rea, MHA, in the Third House of Assembly.

#### *Labour Legislation*

The following legislation is administered by the Department of Labour; *Administration Servants Ordinance* 1958-1963 (in part), *Apprenticeship Ordinance* 1967-1970, *Bureau of Industrial Organizations Ordinance* 1971, *Employment Placement Service Ordinance* 1966, *Employment Statistics Ordinance* 1971, *Employment (Training and Regulation) Ordinance* 1971, *Explosives Ordinance* 1953-1968, *Industrial Organizations Ordinance* 1962-1970, *Industrial Relations Ordinance* 1962-1971, *Industrial Safety, Health and Welfare Ordinance* 1961-1970, *Inflammable Liquid Ordinance* 1953-1967, *Marking of Weight on Heavy Packages Ordinance* 1951 (in part), *Metric Conversion Ordinance* 1970, *Minimum Age (Sea) Ordinance* 1957-1962, *Native Employment Ordinance* 1958-1971, *Public Services Conciliation and Arbitration Ordinance* 1969-1971, *Teaching Service Concilia-*

*tion and Arbitration Ordinance* 1971, *Trade Licensing Ordinance* 1969-1970, *Transactions with Natives Ordinance* 1958-1963 (in part), *Weights and Measures Ordinance* 1951, *Workers' Compensation Ordinance* 1958-1971. Other labour legislation covers employment in the police force, corrective institutions and the fire brigade. Further information on conditions of employment in the Public Service, the police force, corrective institutions and the fire brigade is contained in the relevant chapters of this Report.

#### *Policy Aims and Objectives*

In the early post-war years, labour policy was based largely on the fact that most Papua New Guinean wage-earners were illiterate and were employed in unskilled or low-skilled occupations. In the earlier period, policy was directed to maintaining village life and the attachment of the Papua New Guinean to his land. The aims of labour policy were summarised as follows:

(i) to advance the general policy for the political economic, social and educational advancement of the inhabitants of Papua New Guinea the development of the country's resources; and the maintenance of good order and government; particularly through;

(a) control of the nature and rate of social change among the Papua New Guineans;

(b) education of the Papua New Guinean people;

(c) promotion of an association between the expatriate and Papua New Guinea communities favourable to the people's own advancement and good relations between the races; and

(d) the association of both expatriates and Papua New Guineans in the development of the resources of Papua New Guinea in order to sustain a high standard of living and to improve services;

(ii) to protect the worker against unfair treatment, damage to his health, or deterioration in his traditional standards; and

(iii) to ensure that the employer and worker honour their obligations.

Measures relating to apprenticeship, industrial safety, minimum age for employment, workers' compensation, and protection of workers entering into job contracts, have been progressively introduced since 1951. In recognition of the growing number of freely



engaged labourers working away from village areas and capable to a large extent of protecting their own interests under the changed social conditions, a completely new Native Employment Ordinance was introduced in 1958 providing for improved working conditions, housing standards and increased minimum wages for Papua New Guinean workers.

About the same time the growing awareness and interest of urban workers in negotiating their own terms and conditions of employment led to an expansion of the aims of labour policy to include the following principles:

- (i) facilitation of the growth of industrial organisations and provision for their legal recognition;
- (ii) encouragement of good industrial relations;
- (iii) provision of an orderly method for the determination of wages and terms of employment;
- (iv) assistance in ensuring that the worker has stable employment and that industry has efficient labour;
- (v) provision and encouragement of technical and vocational training directly related to the prospective market for labour; and
- (vi) protection and compensation in respect of all occupational hazards.

Legislation providing for the rights of association and industrial negotiation for all workers was introduced in 1962.

The Department of Labour has the following principal functions:

- (i) the control of the registration of employee and employer organisations and the provision of the necessary registry facilities;
- (ii) the development and encouragement of negotiations between employees and employers and their association at the individual employer and industry level and the provision of conciliation facilities;
- (iii) the establishment of a system of consultation between the Papua New Guinea Government and representatives of employees and employers on labour legislation and other industrial matters;
- (iv) provision of an employment and counselling service, a vocational guidance service (together with the Department of Education) and a personnel management ser-

vice to the employers, and assistance and advice on health, welfare and safety matters;

- (v) the administration of legislation relating to employment in Papua New Guinea;
- (vi) research into such labour matters as employment requirements, patterns and levels of wages and conditions of service, and means of promoting industrial safety, health and welfare;
- (vii) the provision of advice on industrial and commercial training;
- (viii) labour inspection; and
- (ix) advice to workers on the formation of industrial organisations and on industrial relations matters.

#### *Research and Manpower Planning*

The Department of Labour deals with the development of labour policy, for economic research and planning in relation to the labour market and for conducting surveys and special projects in the labour field.

In addition to the continued study of the labour implications of the Bougainville Copper project, other major development projects e.g. forestry, fishing, oil palm and hydroelectric construction were the subject of analysis.

Additional experts from the International Labour Organisation were provided during the year by the United Nations Development Programme to assist in the formulation of firm proposals for the major phase of a Vocational and Industrial Training Project.

#### *Opportunities for Employment*

The number of Papua New Guineans engaged in wage employment has continued to increase (see Appendix XVII, Table 1). Also a much greater proportion of the population is engaged in modified forms of the traditional subsistence agriculture system, e.g. the growing of cash crops.

The marked change in wage employment in recent years of the proportion of workers in urban areas relative to workers in rural employment also continues. The increase has been mainly in manufacturing, commerce and the Public Service. However, the numbers employed in both rural and urban areas have increased absolutely.

Tables in Appendix XVII give details of the characteristics of the industrial wage and

salary earning work force and comparative data for the period 1965-1970.

The new *Employment Statistics Ordinance* 1971 made it possible for the first time to collect annual data on the total work force. Previously employment statistics were collected under the *Native Employment Ordinance* 1958-1971 which restricted the collection to Papua New Guinean workers only. As a result of this widening of scope much adaptation of processing and programming systems became necessary.

#### *Employment and Counselling Service*

This service provides assistance to all people seeking employment at all levels of training and experience and to all employers seeking staff.

Three additional employment and counselling staff have joined the service. Offices have subsequently been opened in Rabaul and Mount Hagen in addition to the existing offices at Lae and Boroko, Port Moresby. Emphasis has been placed on service to secondary school leavers and established development is apparent in this area of work.

During 1971-72 the Service processed, for the first time, all secondary school leavers forms, the total for Papua New Guinea being 4,432.

Relevant employment service figures (excluding school leavers) were:

|                       |    |    |        |
|-----------------------|----|----|--------|
| Applicants registered | .. | .. | 26,599 |
| Vacancies notified    | .. | .. | 14,062 |
| Vacancies filled      | .. | .. | 11,698 |

#### *Terms and Conditions of Employment*

The basic legislation governing terms and conditions of employment is the *Native Employment Ordinance* 1958-1971 which lays down a comprehensive employment code and includes provisions covering the issue of clothing, food and other items of equipment, the provision of housing, messing, ablution, cooking and latrine facilities for employees; the payment of heavy labour and camping allowances; the supply and maintenance of tools of trade by employers (or alternatively payment of a tool allowance to employees); the provision of medical attention, notice of dismissal, recreation and long leave.

The ordinance provides for the following classes of Papua New Guinean workers.

*Agreement Workers (Classes 1 and 2)*. Class 1 is composed of single men or men who are not accompanied by their wives and families.

The maximum period of employment for this group is 2 years, although married men who are joined by their wives and families during the period of agreement may enter into a further agreement for a maximum additional period of 2 years. Class 2 is composed of married men accompanied by dependants. Men in this group may engage for a period of up to three years, with the option for re-engaging at the expiry of the agreement for a further 2 years giving a maximum of 5 years. Except for the cases of immediate re-engagement referred to above, a lapse of at least 3 months must take place between successive agreements entered into by either class of worker.

An agreement may be terminated before the date of expiry on application by either party to a court or an employment officer under conditions specified in the ordinance. Subject to proclamations directed at regulating the employment of Papua New Guinean workers from or in certain areas, an agreement worker may be employed anywhere within Papua New Guinea. Agreement workers (and their wives and children if they accompany them with the consent of the employer) are provided with transport and sustenance from the place of engagement to the place of employment, and to their home on completion of the agreement.

Civil remedies are open to both parties for breach of agreement. Details of the action taken in relation of breaches of agreement are contained in Tables 7, 8, 9 and 10 of Appendix XVII.

*Casual Workers*. The term 'Casual' is used in the ordinance for workers who are employed without written agreement and with no time limit on their employment. In fact they are often employed on a long-term basis. When a casual worker has completed 6 months' continuous service with the same employer, the employer or the casual worker shall give one week's notice to the other of his intention to terminate.

Casual workers may be employed anywhere in Papua New Guinea subject only to proclamations directed at regulating the employment of indigenous persons from or in certain areas.

*Hours of work*. The maximum number of hours of work per week before overtime is involved is 44, from Monday to Saturday inclusive, with a break of one hour after each period of 4 hours' work (or a break

of 1 hour after 5 hours work where a tea break of not less than 10 minutes has been given during the 5 hours). Employees other than shift workers must be given a rest period of at least 24 consecutive hours in every week, while shift workers must be given, in every period of 28 days, rest periods which in the aggregate total not less than 96 hours and which in each instance shall not be less than 24 consecutive hours.

All work in excess of 8 hours in any one day from Monday to Friday, and all work on Saturday afternoon, Sunday or on a public holiday is treated as overtime for which special rates are paid. Overtime for shift workers is all time worked in excess of 8 hours in any one day, all time worked on a public holiday and all time worked in excess of 44 hours in any period of 7 days. In lieu of paying overtime, an employer may allow the employee time off during normal working hours. Such time off must be granted not later than one week after the last day of the month in which the overtime is worked. Except in emergencies the maximum hours including overtime may not exceed 12.

*Medical Inspection and Treatment.* The Native Employment Ordinance provides that a prospective employee shall undergo a medical examination before entering into a written agreement for employment and upon termination of the agreement. An employer is required to provide free medical treatment at the place of employment for all his employees and for the wives and children accompanying them and to take all reasonable precautionary measures to safeguard their health. An employer is also required to transfer workers and dependants to an approved hospital for treatment when necessary. In addition Government medical officers and medical assistants carry out periodic examinations of workers and dependants at the place of employment.

Special medical safeguards are prescribed for workers from high altitude areas (above 3,500 ft) who proceed to places of employment at altitudes below that level. Before entering employment they are vaccinated against tuberculosis, tetanus and whooping cough, and during employment they receive malarial prophylactics. On termination of their employment they are kept under medical surveillance for approximately 3 days before returning to their homes.

No illnesses or deaths among Papua New Guinean workers attributable to occupational diseases were reported during the year. Industrial accidents reported during the year are shown at Table 5 of Appendix XVII.

*Housing.* The Native Employment Ordinance prescribes the types and minimum standards and dimensions of houses for accommodation of Papua New Guinean employees and their accompanying dependants.

*Employment of Women and Juveniles.* Provisions in the Native Employment Ordinance cover the employment of females and protect their health and welfare. Women may be employed under agreement for a specified 2-year maximum period in certain occupations, e.g. nursing, teaching and domestic service and as casual workers in these and other specified occupations, e.g. clerical work, factory work and cocoa, coffee and tea picking. Females in career occupations are employed by both Government and private enterprise. The agreement system is not used under these circumstances. Employment in heavy labour is prohibited and provision is made for the granting of maternity leave of absence and for rest periods. Minimum wages for females are the same as those for males.

The Apprenticeship Ordinance prescribes a minimum age of 15 years for the employment of apprentices. The Minimum Age (Sea) Ordinance prescribes a minimum age of 14 years for service at sea, subject to the written permission of the Director of Education or an officer authorised by him. Under the provisions of the Native Employment Ordinance, the minimum age for employment is 16 years, except in accordance with an exemption issued by the Secretary for Labour when the minimum age for employment of a local person is 14 years. Such an exemption may not be made for agreement work or for heavy labour.

*Underground and Night Work.* The Native Employment Ordinance applies to local workers employed in mining and this ordinance and the Mines and Works Regulation Ordinance cover the regulation and inspection of mines and works, including the conditions of employment in underground workings. The legislation excludes women and juveniles from employment underground.

There are very few undertakings which operate regularly at night and such work is almost entirely restricted to taxi driving, loading and unloading ships, attending copra

driers, operating telephone and radio services and police and hospital duties.

*Industrial Home Work.* There is no industrial home work apart from local handicrafts manufactured in some areas.

*Job Contracts.* The *Transactions with Natives Ordinance 1958-1963* gives protection to local persons entering into job contracts by ensuring that both parties are aware of the nature of the contract and the requirements for its performance. Contracts, except those of a minor nature as specified in the ordinance, are required to be in writing unless a District Commissioner or Deputy District Commissioner grants a written exemption, and are subject to inspection by Labour Inspectors. The Administrator has power under the ordinance to control grants or payments to a contractor of goods or commodities in lieu of money, advances in either cash or kind and the granting of credit.

#### *Remuneration*

Wages must be paid in coin or notes which are legal tender in Papua New Guinea at least once every lunar month if an employee is receiving a cash wage plus food and at 2 weekly intervals if he is paid an all cash wage.

*Native Employment Ordinance.* Until early 1972, the Native Employment Ordinance provided for a cash wage plus prescribed items such as accommodation, food, clothing, cooking utensils, blankets, towels, soap, tobacco and matches. However, amendments to this ordinance and the Industrial Relations Ordinance which became operative on 2 March 1972, provided for the establishment of a Minimum Wages Board and a minimum all-cash wage of \$5.90 per week. This wage is transitional in that it will remain at this figure until varied by a determination of the Minimum Wages Board. From the all-cash wage, weekly deductions of 87c for accommodation, \$2.50 for food and 36c for clothing and other personal issues may be made by agreement between the employer and employee. These amounts may be deducted only where the items mentioned are supplied by the employer at a standard not lower than that prescribed under the Native Employment Ordinance.

Persons employed in heavy labour are paid an additional allowance of \$22 per annum and an allowance at the rate of \$1.50 per week is payable where the worker is required to camp out or is a member of a camping party.

For employees who are employed on a daily basis, there are 2 rates, depending on whether accommodation is provided or not. If accommodation is provided, the daily rate for an eight-hour day is 92c; if accommodation is not supplied, the daily rate is \$1.08.

As a rule, the Minimum Wage is acceptable only to unskilled workers entering the employment market for the first time. Generally, skilled and experienced workers are able to command wages in excess of the minimum.

In the case of Agreement workers, deductions which are refundable in whole or part are deferred wages at 50c per week and repatriation cost at 25c per week. Prior to the amended legislation an Agreement worker was repatriated to his home village without cost to him. Now, a deduction of 25c per week may be made from the total wage in this connection.

There is no compulsion upon an employee to return to his home if he does not wish to do so. In such circumstances, a deduction which has been made from his wage, as a contribution towards repatriation, will be refunded to him at the expiration of his contract of employment, thus relieving the employer of all repatriation obligations. If the sum deducted exceeds the cost of repatriation, the balance will be refunded to the employee. Should the deduction not cover costs, the employer is required to pay the balance.

#### *Industrial Organisations*

The *Industrial Organisations Ordinance 1962-1970* provides for the registration and control of industrial organisations. The ordinance is intended to apply to all industrial organisations composed of not less than 4 employers or 20 employees, but provision is made for smaller industrial organisations to be registered under the ordinance. Registered industrial organisations and their officers and members have immunity from civil suit when furtherance of an industrial dispute leads to a breach of contract of employment, interferes with the right of some other person to dispose of his capital or of his labour as he wills, or acts in restraint of trade: and members of industrial organisations are not liable to criminal prosecution for conspiracy or otherwise by reason only of the fact that the objects of the organisation are in restraint of trade. Other provisions of the ordinance relate to the constitution and rules of industrial organisations and the amalgamation, federation and affiliation of registered organisations.

Workers' Associations have been formed at Lae, Goroka, Kainantu, Mount Hagen, Madang, Wewak, Vanimo, Lorengau, Kavieng, Rabaul, Sohano, Panguna, Loloho, Lombrum, Port Moresby, Cape Rodney, Samarai, Popondetta, Daru and Kerema. These have been registered as industrial organisations.

Other industrial organisations representing employees in Papua New Guinea include the Bank Officials' Association of Papua New Guinea, the Public Service Association of Papua New Guinea, the Staff Association of the University of Papua New Guinea, the Police Association of Papua New Guinea, the Staff Association of the Papua New Guinea Institute of Higher Technical Education, the Senior Police Officers Guild, the Air Traffic Services Association, the Local Government Officers Association, the Airline Hostesses' Association and the Papua New Guinea Teachers' Association.

Financial membership figures for the years 1967 to 1971 appear in Appendix XIV.

The Madang, Morobe, Rabaul, New Ireland and Manus District Workers' Associations have organised branches. The East Sepik District Workers' Association has also organised a branch for the Maprik workers. The Samarai Association has set up branches at Alotau and Misima.

In addition to the Federation of Workers' Associations which now has 9 member associations, a Trade Union Council has been formed in Port Moresby covering 5 workers' unions.

Advice and assistance to industrial organisations was provided by specialist officers of the Department of Labour. Technical advice and guidance was given by the Department until these functions were taken over by the Bureau of Industrial Organisations on 23 March 1972, to any group which indicates a desire to form an industrial organisation and assistance is provided in the preparation of a draft constitution and rules, in the training of office bearers and in the introduction of books of account. Industrial organisations officers of the Bureau make frequent visits to centres throughout Papua New Guinea and, wherever possible, take the opportunity of discussing aspects of industrial organisation with members. Workers' education courses designed to increase the interest of members as well as to ensure greater efficiency among office bearers are conducted by officers from

the Bureau of Industrial Organisations. A list of all these courses has been circulated to all workers' associations in Papua New Guinea.

Several pamphlets explaining the functions of workers' associations and the duties of office bearers have been prepared and distributed to each workers' association. A news sheet 'Workers' News' is published each month by the Bureau and distributed to industrial organisations and other interested bodies.

The Bureau of Industrial Organisations is a statutory authority under the direction of a tripartite governing board and its main purpose is to give greater stimulus and support to the development of industrial organisations in Papua New Guinea. It will assist industrial organisations of both employers and employees.

### *Industrial Relations*

The *Industrial Relations Ordinance 1962-1971* is designed to emphasise that the informal settlement of disputes and conciliation and negotiation are to be preferred to litigation or arbitration. It provides for the formation of industrial councils as a means of continuous joint consultation between employers and employees.

Where complaints may lead to a stoppage or dispute, workers are encouraged to report them to the nearest labour officer or responsible administration officer before an actual stoppage occurs. Many complaints are of a minor nature and are settled by labour officers who investigate the complaints immediately they are received. Disputes of any consequence are handled by specialist industrial relations officers.

The Industrial Relations Ordinance provides for processes of conciliation and negotiation which are available to both parties. The Ordinance empowers the Administrator to establish *ad hoc* boards of inquiry and where an industrial dispute exists or is apprehended, any matter connected with the economic or industrial conditions of Papua New Guinea which is involved in the dispute may be referred to a board for inquiry and report. A board of inquiry consists of a chairman and at least 3 other members appointed by the Administrator, of whom at least one must not be an officer of the Public Service of Papua New Guinea or of Australia. The Administrator is also empowered to establish arbitration tribunals to deal with industrial disputes,

the constitution of such tribunals being left for determination by the Administrator in each particular case.

The registration of awards made by tribunals are provided for in the ordinance. Industrial agreements must also be filed for registration and, when registered, have the force of awards. The Administrator-in-Council may disallow an award on the ground that it is contrary to public policy, inconsistent with a law in force in or in part of Papua New Guinea, or not in the best interests of the country. Registered awards are binding on the employers and employees to whom they relate.

The terms of a registered award can be declared by the Administrator-in-Council to be a Common Rule applicable to employers and employees within the area covered by the Award, whether the employer is named as a party to the award or not.

In summary, the principal processes available for the settlement of disputes under the Industrial Relations Ordinance are:

(i) A matter may be investigated by the Secretary for Labour, and a board of inquiry may be required to inquire and report upon any matter connected with or relevant to a dispute; or

An interested party may refer a dispute to the Secretary for Labour, who may require the parties to enter into negotiations within 14 days, and where, after 28 days no settlement has been effected, may call a compulsory conference of the parties.

(ii) At any stage, a party to a dispute may call upon the Secretary for Labour for assistance, whereupon it is the duty of the Secretary to endeavour to negotiate a settlement of the dispute.

(iii) Finally, where attempts at settlement have apparently failed, a dispute may be referred to an arbitration tribunal for determination.

*Board of Inquiry.* Following on the acceptance of the recommendations of the Board of Inquiry established under the provisions of the *Industrial Relations Ordinance 1962-1971* to investigate and report upon the level and component of the rural minimum wage for Papua New Guinea an amendment was passed during the November 1970 sittings of the House of Assembly to increase the prescribed minimum cash component of the rural wage by 50c per week with effect from 1 January 1971.

*Minimum Wages Board.* In March 1971 the House of Assembly passed further amendments to the *Native Employment Ordinance 1958-1971* and to the *Industrial Relations Ordinance 1962-1971*.

The amendments introduced an all cash wage of \$5.90 per week (less deductions for food, accommodation and other items) and provided for the establishment of a Minimum Wages Board. Provision has been made for a Minimum Wages Board to consist of no less than 5 members. It has decision making powers similar to those given to the Tribunal established under the *Industrial Relations Ordinance 1962-1971*. The types of matters which may be referred to the Board may include:

- Minimum rates of pay including those of urban areas.
- Allowable deductions for food and accommodation.
- Deferred wages; and
- Allowances.

On 8 June 1972 the Administrator's Executive Council approved the establishment of two Minimum Wages Boards and referred to these the following matters for determination:

1. The appropriateness or otherwise of the present minimum wage levels payable under awards and common rules to unskilled adults and unskilled married juniors (under 19 years) in the City of Port Moresby and surrounding areas to which the awards and common rules apply and, if in the opinion of the Board the present minimum wage levels are inappropriate, what are the appropriate levels.
2. The calculation of allowable deductions for food, accommodation and issues supplied by employers to employees at a scale or of a standard other than that prescribed by the *Native Employment Ordinance 1958-1971*.

#### *Industrial Agreements*

In Papua New Guinea General Employment Awards are in force in Lae, Goroka, Mt Hagen, Madang, Wewak, Rabaul, Lorengau, Kavieng, Vanimo, Port Moresby, Samarai/Alotau, Popondetta, Daru, Kerema and Bwagaioia. All these awards, with the exception of the Kerema General Employment Award, were negotiated between the Employers' Federation of Papua New Guinea and the relevant local workers' Association or

Union. The awards apply to all workers employed by members of the Employers' Federation regardless of whether or not they are members of a Workers' Organisation, other than those employees directly engaged in primary production, domestic duties, stevedoring operations, shipping services, apprenticeships or those covered by a specific industry award, i.e. Port Moresby Building and Construction Industry Award. In Kerema the agreement was negotiated between the Workers Association and an individual employer, Mr H. G. Wilson.

In all cases the agreements cover rates of pay and annual and sick leave entitlements and other general conditions of employment for workers in those areas.

The agreements in force in Rabaul, Lae, Madang, Mt Hagen, Goroka, Samarai/Alotau, Port Moresby, Lorengau and Kavieng have been declared common rules by the Administrator's Executive Council.

Boards of Reference have been established under the Wewak, Mt Hagen, Madang, Kavieng, Goroka, Lae, Samarai/Alotau, Port Moresby, Lorengau, Vanimo and Rabaul Awards. Occupations in all General Employment Awards have been classified from Class 1 to Class 7.

The Port Moresby Building and Construction Industry Award is an agreement made between the Employers' Federation of Papua New Guinea and the Central District Building and Construction Industry Workers' Union which applies to all employees directly engaged in the building industry in the Port Moresby Area and employed by members of the Employers' Federation of Papua New Guinea.

An agreement which was negotiated between the Department of the Navy HMAS 'Tarangau' and the Naval Civilian Workers' Association classifies occupations as Class 1 and Class 2 and makes provision for Public Service rates of pay in the higher classifications.

Stevedoring agreements are in force in the ports of Lae, Port Moresby, Kieta, Daru, Samarai/Alotau, Kimbe Bay, Madang, Rabaul, Wewak and Kavieng, and cover rates of pay for workers engaged as stevedores in those ports. The agreements were negotiated between the Employers' Federation of Papua New Guinea and the local workers' Association with the exception of Kimbe Bay. In the

port of Kimbe Bay the agreement was the result of negotiations between Kimbe Bay Stevedores Pty Ltd, and the local stevedores.

The Lae Stevedoring Award No. 9 of 1970 was declared a common rule by the Administrator's Executive Council.

In the ports of Rabaul, Port Moresby and the Milne Bay area Ships' crews are covered by agreements regulating rates of pay and conditions of employment generally. The agreements were negotiated between the Employers' Federation of Papua New Guinea and the local workers' organisation. The Milne Bay Shipping Award was declared a common rule by the Administrator's Executive Council.

Ships crews operating outside Papua New Guinea waters are the subject of two separate awards designed specifically for such employees. The employers, Karlander (Papua) Pty Ltd, China Navigation Pty Ltd, and Liquefied Gas Pty Ltd, negotiated these awards with Mr A. Maori Kiki, as the elected representative of the seamen. Both awards have been declared common rules by the Administrator's Executive Council.

Awards setting out rates of pay and conditions of employment for workers engaged in the sawmilling and timber industry are in force in Papua New Guinea.

In the Abau Sub district an agreement was negotiated between the Abau District Workers' Association and Pacific Island Timbers Pty Ltd, while in the Gulf District the local Workers' Association has negotiated 2 awards from sawmilling employees, one with the Moveave Co-operative Society Ltd (Sawmill) and the other with the Employers' Federation of Papua New Guinea on behalf of workers engaged in the industry in the Kikori Sub district. In each of these 3 awards employees are classified as Class 1, Class 2 and Class 3.

The timber and sawmilling awards in all cases excludes apprentices indentured under the *Apprenticeship Ordinance* 1967-1970 and those who have completed a formal apprenticeship training.

The *Bougainville Copper Project (Indigenous Construction Workers) Award* 1970 sets out rates of pay and conditions of employment for those workers employed by Bougainville Copper Pty Ltd, and was negotiated by that company and the Bougainville Construction and General Workers' Union.

The *Bougainville Mining Workers (Local Employees) Award 1970* provides for rates of pay and conditions of employment for Papua New Guinean employees engaged by Bougain-

ville Copper Pty Ltd, and was jointly signed by that Company and the Bougainville Mining Workers Union.

URBAN WORKER'S WEEKLY RATES OF PAY

| Classification                 | 1       | 2                 | 3                   | 4       | 5  | 6                      | 7       | 8       | 9            | Year of Employment |
|--------------------------------|---------|-------------------|---------------------|---------|--|------------------------|---------|---------|--------------|--------------------|
|                                | Vanimo  | Bwagaogia, Misima | Kerena, Mount Hagen | Kieta   | Madang, Popondetta, Rabaul, Samarai, Alotau, Wewak | Daru, Goroka, Lorengau | Kavieng | Lae     | Port Moresby |                    |
| Juniors ..                     | \$ 6.00 | \$ 6.25           | \$ 6.25             | \$ 6.25 | \$ 6.75  | \$ 6.75                | \$ 6.75 | \$ 6.75 | \$ 7.00      | First year         |
|                                | 6.25    | 6.25              | 6.25                | 6.50    | 7.00   | 6.75                   | 6.75    | 7.00    | 7.00         | Second year        |
|                                | 6.75    | 6.25              | 6.25                | 6.75    | 7.25   | 6.75                   | 6.75    | 7.25    | 7.00         | Third year         |
| Unmarried—<br>General Labourer | 6.00    | 6.50              | 6.50                | 7.00    | 7.50   | 7.00                   | 7.00    | 7.50    | 8.00         | First six months   |
|                                | 6.00    | 6.50              | 6.50                | 7.00    | 7.50   | 7.00                   | 7.50    | 7.50    | 8.00         | Second six months  |
|                                | 6.25    | 6.75              | 7.00                | 7.25    | 7.75   | 7.50                   | 7.75    | 7.75    | 8.00         | Second year        |
| Sanitary Labourers             | 6.75    | 7.00              | 7.25                | 7.50    | 8.00   | 7.75                   | 8.00    | 8.00    | 8.00         | Third year         |
|                                | 6.75    | 7.25              | 7.25                | 7.75    | 8.25   | 7.75                   | 7.75    | 8.25    | 8.75         | First six months   |
|                                | 7.00    | 7.25              | 7.25                | 7.75    | 8.25   | 7.75                   | 8.25    | 8.25    | 8.75         | Second six months  |
| Class 1 ..                     | 7.00    | 7.50              | 7.75                | 8.00    | 8.50   | 8.25                   | 8.50    | 8.50    | 8.75         | Second year        |
|                                | 7.50    | 7.75              | 8.00                | 8.25    | 8.75   | 8.50                   | 8.75    | 8.75    | 8.75         | Third year         |
|                                | 7.25    | 7.50              | 7.50                | 7.75    | 8.25   | 8.00                   | 8.25    | 8.25    | 8.75         | First year         |
| Class 2 ..                     | 7.50    | 7.75              | 7.75                | 8.00    | 8.50   | 8.25                   | 8.50    | 8.50    | 8.75         | Second year        |
|                                | 7.75    | 8.00              | 8.00                | 8.25    | 8.75   | 8.50                   | 8.75    | 8.75    | 8.75         | Third year         |
|                                | 8.00    | 8.75              | 8.75                | 8.75    | 9.25   | 9.25                   | 9.25    | 9.75    | 10.25        | First year         |
| Class 3 ..                     | 9.00    | 9.75              | 9.75                | 9.75    | 10.25  | 10.25                  | 10.25   | 10.75   | 11.25        | Second year        |
|                                | 10.00   | 10.75             | 10.75               | 10.75   | 11.25  | 11.25                  | 11.25   | 11.75   | 12.25        | Third year         |
|                                | 11.50   | 11.50             | 11.50               | 11.50   | 12.00  | 12.00                  | 12.00   | 12.75   | 13.25        | First year         |
| Class 4 ..                     | 12.50   | 12.50             | 12.50               | 12.50   | 13.00  | 13.00                  | 13.00   | 13.75   | 14.25        | Second year        |
|                                | 13.50   | 13.50             | 13.50               | 13.50   | 14.00  | 14.00                  | 14.00   | 14.75   | 15.25        | Third year         |
|                                | 15.50   | 15.50             | 15.50               | 15.50   | 16.00  | 16.00                  | 16.00   | 16.50   | 17.00        | First year         |
| Class 5 ..                     | 16.50   | 16.50             | 16.50               | 16.50   | 17.00  | 17.00                  | 17.00   | 17.50   | 18.00        | Second year        |
|                                | 17.50   | 17.50             | 17.50               | 17.50   | 18.00  | 18.00                  | 18.00   | 18.50   | 19.00        | Third year         |
|                                | 17.00   | 17.00             | 17.00               | ..      | 17.50  | 17.50                  | 17.50   | 19.50   | 20.00        | First year         |
| Class 6 ..                     | 17.50   | 17.50             | 17.50               | ..      | 18.00  | 18.00                  | 18.00   | 20.50   | 21.00        | Second year        |
|                                | 18.00   | 18.00             | 18.00               | ..      | 18.50  | 18.50                  | 18.50   | 21.50   | 22.00        | Third year         |
|                                | 20.00   | 20.00             | 20.00               | ..      | 20.50  | 20.50                  | 20.50   | 22.50   | 23.00        | First year         |
| Class 7 ..                     | 21.00   | 21.00             | 21.00               | ..      | 21.50  | 21.50                  | 21.50   | 23.50   | 24.00        | Second year        |
|                                | 22.00   | 22.00             | 22.00               | ..      | 22.50  | 22.50                  | 22.50   | 24.50   | 25.00        | Third year         |
|                                | 21.00   | 21.00             | 21.00               | ..      | 21.50  | 21.50                  | 21.50   | 25.50   | 26.00        | First year         |
|                                | 22.00   | 22.00             | 22.00               | ..      | 22.50  | 22.50                  | 22.50   | 26.50   | 27.00        | Second year        |
|                                | 23.00   | 23.00             | 23.00               | ..      | 23.50  | 23.50                  | 23.50   | 27.50   | 28.00        | Third year         |

|  |    |                                       |          |
|--|----|---------------------------------------|----------|
| The minimum rates of pay are as follows:               |    | Class 6 occupations                   | \$       |
| <i>Port Moresby Building and Construction Industry</i> |    | 1st year ..                           | .. 23.00 |
|  |    | 2nd year ..                           | .. 24.00 |
|  |    | 3rd year ..                           | .. 25.00 |
|  | \$ | Class 7 occupations                   |          |
| Unmarried juniors ..                                   | .. | 1st year ..                           | .. 26.00 |
| General labourers ..                                   | .. | 2nd year ..                           | .. 27.00 |
| Class 1 occupations ..                                 | .. | 3rd year ..                           | .. 28.00 |
| Class 2 occupations                                    |    |                                       |          |
| 1st year ..  | .. |                                       |          |
| 2nd year ..  | .. |                                       |          |
| 3rd year ..  | .. |                                       |          |
| Class 3 occupations                                    |    | <i>Lombrum Naval Civilian Workers</i> |          |
| 1st year ..  | .. | Unskilled general labourers ..        | 7.50     |
| 2nd year ..  | .. | Class 1 occupations                   |          |
| 3rd year ..  | .. | 1st year ..                           | .. 8.50  |
| Class 4 occupations                                    |    | 2nd year ..                           | .. 9.00  |
| 1st year ..  | .. | 3rd year ..                           | .. 9.50  |
| 2nd year ..  | .. | Class 2 occupations                   |          |
| 3rd year ..  | .. | 1st year ..                           | .. 10.50 |
| Class 5 occupations                                    |    | 2nd year ..                           | .. 11.50 |
| 1st year ..  | .. | 3rd years ..                          | .. 12.50 |
| 2nd year ..  | .. |                                       |          |
| 3rd year ..  | .. |                                       |          |

These categories are paid in accordance with Public Service rates.



**Stevedoring Workers**

*Lae, Port Moresby, Kieta casual employees*

rates per shift  
of 8 hrs

|   |      |
|---|------|
| General labourer .. ..  | 2.40 |
| Winchman and hatchman .. ..   | 2.72 |
| Foreman/Gang supervisor (Lae only) .. ..  | 3.04 |
| Permanent Employees (Port Moresby only) General labourer—Minimum wage per week = \$8.00 + 6c per hr loading while engaged in stevedoring. |      |
| Winchman. Minimum wage per week = \$8.50 + 10c per hr loading while engaged in stevedoring.   |      |
| Foreman—weekly rate \$13.50.  |      |

**Daru**

rates per shift  
of 8 hrs

|                         |      |
|-------------------------|------|
| Casual employees        |      |
| General labourers .. .. | 1.60 |

**Samarai/Alotau**

|                         |      |
|-------------------------|------|
| Casual employees        |      |
| General labourers .. .. | 2.00 |
| Winchman/hatchman .. .. | 2.16 |

**Kimbe Bay, Madang**

|                               |      |
|-------------------------------|------|
| Casual employees              |      |
| General labourer .. ..        | 1.92 |
| Winchman .. ..                | 2.24 |
| Foreman/Gang supervisor .. .. | 2.56 |

**\*Rabaul**

|                         |      |
|-------------------------|------|
| Casual employees        |      |
| General labourers .. .. | 2.25 |
| Tally clerk .. ..       | 2.55 |
| Winchman .. ..          | 2.60 |
| Gang supervisor .. ..   | 3.00 |

**\*Wewak**

|                         |      |
|-------------------------|------|
| Casual employees        |      |
| General labourer .. ..  | 1.84 |
| Winchman/hatchman .. .. | 2.08 |
| Foreman .. ..           | 2.32 |

**\*Kavieng**

|                         |      |
|-------------------------|------|
| Casual employees        |      |
| General labourer .. ..  | 1.60 |
| Winchman/hatchman .. .. | 1.80 |
| Foreman .. ..           | 2.00 |

\* At Rabaul, Wewak and Kavieng a shift is comprised of 7 actual working hours while at other centres a shift is comprised of 8 actual working hours.

**Seamen**

Weekly wage rates for seamen in Port Moresby and the Milne Bay area are:

| Occupation                            | Port Moresby | Milne Bay District |
|---------------------------------------|--------------|--------------------|
|                                       | \$           | \$                 |
| Ordinary Seamen .. ..                 | 3.10         | 4.10-4.60          |
| Steward/Cooking Assistant .. ..       | ..           | 4.10-4.60          |
| Able Seaman .. ..                     | ..           | 4.85-5.35          |
| Engine Hand; Cook .. ..               | ..           | 4.85-5.35          |
| Engine Hand Grade B .. ..             | 3.35-3.60    | ..                 |
| Engine Hand Grade A .. ..             | 3.80-4.20    | ..                 |
| Leading Seaman .. ..                  | 3.80-4.20    | 5.85-7.85          |
| Pinnaceman: Cook .. ..                | ..           | 5.85-7.85          |
| Boatswain, Leading Engine Hand .. ..  | 4.60-6.60    | 8.60-10.60         |
| Coxswain (under 15 tons) .. ..        | ..           | 12.60-14.60        |
| Master Grade B .. ..                  | 8.50-10.50   | ..                 |
| Master Grade A .. ..                  | 10.50-12.50  | ..                 |
| Master (not exceeding 50 tons) .. ..  | ..           | 14.10-15.10        |
| Master (not exceeding 150 tons) .. .. | ..           | 17.10-19.10        |
| Master (unlimited) .. ..              | ..           | 18.10-20.10        |

Weekly wage rates for seamen in Rabaul are:

|  | \$          |
|--|-------------|
| Shipping employees unmarried juniors under age of 19 years .. .. | 2.60        |
| Unclassed crew members and married juniors .. ..                 | 3.35-3.85   |
| Crew members occupying position as Class 3 .. ..                 | 4.10-4.60   |
| Crew Members occupying position as Class 2 .. ..                 | 5.10-7.10   |
| Employees occupying position of ship's Master .. ..              | 9.60-11.60  |
| Employees occupying position of Senior Ship's master .. ..       | 12.60-14.60 |

Rates of pay applying to seamen on overseas vessels are:

| Occupation                | Liquified Gas Carriers Pty Ltd | Karlander (Papua) Pty Ltd, China Navigation Pty Ltd |
|---------------------------|--------------------------------|---|
| Rates per Calendar Month— | \$                             | \$  |
| Seamen—                   |                                |   |
| 1st year .. ..            | 44.00                          | 44.00   |
| 2nd year .. ..            | 59.00                          | 59.00   |
| 3rd year .. ..            | 68.00                          | 68.00   |
| Leading Hand—             |                                |   |
| 1st year .. ..            | ..                             | 46.00   |
| 2nd year .. ..            | ..                             | 61.00   |
| 3rd year .. ..            | ..                             | 70.00   |
| Bosun—                    |                                |   |
| 1st year .. ..            | 51.00                          | 50.00   |
| 2nd year .. ..            | 66.00                          | 65.00   |
| 3rd year .. ..            | 75.00                          | 74.00   |

Seamen are in addition to the rates of pay listed in all the above awards, provided with food, accommodation and issues.

While the foregoing rates of pay for all categories illustrate a minimum wage payable this is usually acceptable only to the unskilled workers, many of whom are entering employment for the first time.

*Kikori Sawmilling and Timber Industry*

|                         | \$    |
|-------------------------|-------|
| General labourers .. .. | 6.00  |
| Class 1 occupations     |       |
| 1st year .. ..          | 6.00  |
| 2nd year .. ..          | 6.50  |
| 3rd year .. ..          | 7.00  |
| Class 2 occupations     |       |
| 1st year .. ..          | 8.00  |
| 2nd year .. ..          | 9.00  |
| 3rd year .. ..          | 10.00 |
| Class 3 occupations     |       |
| 1st year .. ..          | 13.00 |
| 2nd year .. ..          | 14.00 |
| 3rd year .. ..          | 15.00 |

*Cape Rodney Sawmilling and Timber Industry*

|  | \$    |
|--|-------|
| General labourers                            |       |
| 1st 3 months employment ..                   | 5.90  |
| Upon completion of 3 months employment .. .. | 6.25  |
| On completion of 1 year ..                   | 6.50  |
| On completion of 2 years ..                  | 6.75  |
| Class 1 occupations                          |       |
| 1st year .. ..                               | 6.50  |
| 2nd year .. ..                               | 7.00  |
| 3rd year .. ..                               | 7.50  |
| Class 2 occupations                          |       |
| 1st year .. ..                               | 8.50  |
| 2nd year .. ..                               | 9.50  |
| 3rd year .. ..                               | 10.50 |
| Class 3 occupations                          |       |
| 1st year .. ..                               | 13.50 |
| 2nd year .. ..                               | 14.50 |
| 3rd year .. ..                               | 15.50 |

*Moveave Sawmilling and Timber Industry*

|                         | \$    |
|-------------------------|-------|
| General labourers .. .. | 6.00  |
| Class 1 occupations     |       |
| 1st year .. ..          | 6.00  |
| 2nd year .. ..          | 6.50  |
| 3rd year .. ..          | 7.00  |
| Class 2 occupations     |       |
| 1st year .. ..          | 8.00  |
| 2nd year .. ..          | 9.00  |
| 3rd year .. ..          | 10.00 |

|                     | \$    |
|---------------------|-------|
| Class 3 occupations |       |
| 1st year .. ..      | 13.00 |
| 2nd year .. ..      | 14.00 |
| 3rd year .. ..      | 15.00 |

*Registered Awards*

At 30 June 1972 the following awards, registered under the *Industrial Relations Ordinance* 1962-1971, were in force:

- Award No. 9 of 1967: Royal Papua New Guinea Constabulary Award, 1967.
- Award No. 15 of 1967: Royal Papua New Guinea Constabulary Award (No. 2), 1967.
- Award No. 1 of 1968: Royal Papua New Guinea Constabulary (Allowance) Award, 1968.
- Award No. 3 of 1968: Royal Papua New Guinea Constabulary (Allowance), Award (No. 2) 1968.
- Award No. 5 of 1968: Rabaul Shipping Award 1968.
- Award No. 11 of 1968: South Pacific Post Pty Ltd, (Printing Industry) Award 1968.
- Award No. 12 of 1968: Papua New Guinea Printing Company Pty Ltd, Award 1968.
- Award No. 2 of 1969: Rabaul General Employment Award, 1969.
- Award No. 3 of 1969: Kavieng Stevedoring Award, 1969.
- Award No. 4 of 1969: Mt Hagen General Employment Award, 1969.
- Award No. 5 of 1969: Madang General Employment Award, 1969.
- Award No. 6 of 1969: Kavieng General Employment Award, 1969.
- Award No. 7 of 1969: Wewak Stevedoring Award, 1969.
- Award No. 8 of 1969: Goroka General Employment Award, 1969.
- Award No. 9 of 1969: Wewak General Employment Award, 1969.
- Award No. 10 of 1969: Samarai Stevedoring Award, 1969.
- Award No. 2 of 1970: Lae General Employment Award, 1970.
- Award No. 3 of 1970: Milne Bay District Shipping Award, 1970.
- Award No. 4 of 1970: Samarai/Alotau General Employment Award, 1970.

- Award No. 5 of 1970: Daru General Employment Award, 1970.
- Award No. 8 of 1970: Daru Stevedoring Award, 1970.
- Award No. 10 of 1970: Airline Pilots (Papuan Airlines Pty Ltd) Award, 1970.
- Award No. 11 of 1970: Madang Stevedoring Award, 1970.
- Award No. 12 of 1970: Rabaul Stevedoring Award, 1970.
- Award No. 15 of 1970: Lorengau General Employment Award, 1970.
- Award No. 17 of 1970: Bougainville Copper Project (Expatriate Construction Workers) Award, 1970.
- Award No. 18 of 1970: Bougainville Copper Project (Indigenous Construction Workers) Award, 1970.
- Award No. 19 of 1970: Bougainville Mining Workers (Local Employees) Award, 1970.
- Award No. 20 of 1970: Kavieng General Employment Award, 1970.
- Award No. 1 of 1971: Vanimo General Employment Award, 1971.
- Award No. 2 of 1971: Kikori Sawmilling and Timber Industry Award, 1971.
- Award No. 3 of 1971: Air Hostesses (Ansett Airlines of Papua New Guinea) Award 1971.
- Award No. 4 of 1971: Naval Civilian Workers' (Lombrum) Award, 1971.
- Award No. 5 of 1971: General Employment (Amending) Award, 1971.
- Award No. 6 of 1971: Samarai/Alotau Stevedoring Award 1971.
- Award No. 7 of 1971: Rabaul Stevedoring Award 1971.
- Award No. 8 of 1971: Kerema General Employment Award, 1971.
- Award No. 9 of 1971: Bwagaioia General Employment Award, 1971.
- Award No. 10 of 1971: Samarai/Alotau General Employment Award, 1971.
- Award No. 11 of 1971: South Pacific Post Pty Ltd, (Printing Industry) Award.
- Award No. 12 of 1971: Milne Bay District Shipping Award, 1971.
- Award No. 13 of 1971: Port Moresby General Employment Award, 1971.
- Award No. 14 of 1971: Port Moresby Building and Construction Industry Award 1971.
- Award No. 15 of 1971: Port Moresby Waterside Workers' Award, 1971.
- Award No. 16 of 1971: Cape Rodney Sawmilling and Timber Industry Award 1971.
- Award No. 17 of 1971: Air Pilots (Aerial Tours Pty Ltd) Award, 1971.
- Award No. 1 of 1972: Kimbe Bay Stevedoring Award 1972.
- Award No. 2 of 1972: Air Pilots (Macair Charters Pty Ltd) Award, 1972.
- Award No. 3 of 1972: Lae Stevedoring Award 1972.
- Award No. 4 of 1972: Papua New Guinea Overseas Seamen's Award, 1972.
- Award No. 5 of 1972: Papua New Guinea Overseas Seamen's (Liquified Gas Carriers) Award, 1972.
- Award No. 6 of 1972: Moveave Sawmilling and Timber Industry Award, 1972.

#### *Indebtedness*

Indebtedness among wage-earners and salaried workers is negligible.

#### *Discrimination and Equal Remuneration*

Wage rates and conditions of employment for Papua New Guinean employees are determined under the local legislation or as a result of industrial agreements reached between organisations of employers and employees. These wage rates and conditions of employment are generally related to conditions in Papua New Guinea and not to economic conditions in Australia. Wage rates and conditions of employment for expatriate employees are, however, generally based on Australian industrial awards or related to the conditions for comparable employment in Australia. They have regard to the more highly developed economy of the metropolitan country, its higher living standards and strongly competitive labour market. Because of Papua New Guinea's need for skilled and experienced workers, many expatriate employees also receive additional emoluments and benefits to compensate them for living and working away from their homeland.

Education and training programmes are designed to provide increasing numbers of skilled workers to meet expanding employment needs.

Labour legislation relating to Papua New Guinean workers does not discriminate against women; the minimum conditions of wages, housing, rations and other benefits are applicable to all workers, both male and female.

#### *Workers' Compensation*

Compensation for disease, injury or death arising out of, or in the course of employment is provided for under the Workers' Compensation Ordinance, which provides a single code of compensation for all workers with scales of compensation payments related to wage levels. The maximum amount of compensation in respect of death or specific injuries is \$12,000, with compensation for other specified injuries on a graduated scale to a minimum of \$720 for specified injuries.

Recent amendments to the Workers' Compensation Ordinance provide for a Commissioner of Compensation to supervise the collection and distribution of compensation. The Commissioner will have the power to invest monies held in trust.

Provision is made for a weekly payment of \$2.80 in respect of each fully dependent child under the age of 16 years of a deceased worker, for payment of medical and funeral expenses and for weekly payments (not exceeding the amount of the weekly wage) to totally or partially incapacitated workers.

When payment of compensation is authorised in the case of a worker whose wages are less than \$800 a year, 27 per cent of the prescribed maximum is payable and where the wages are \$800 a year or more, but less than \$1,336, 60 per cent of the maximum payable.

In cases of partial incapacity the court has power to award a lump sum in compensation. When a Papua New Guinean worker sustains injury causing temporary incapacity he suffers no economic disadvantage inasmuch as his employer continues to supply wages, food accommodation and other issues as if he were still working.

The legislation provides that where a Local Court certifies that any dependants of a Papua New Guinean worker are only dependent by traditional custom (i.e. not actually dependent) then the amount of compensation payable to all dependants shall not exceed \$300.

Except where the Minister for Labour authorises an employer to undertake the liability to pay compensation to his own workers, the ordinance provides that an employer shall obtain from an approved insurer a policy of insurance for the full amount of his liability.

Provision is made for the appointment of medical referees and for disposal cases to be settled by arbitration, with the right of appeal to the Supreme Court.

There are no specific provisions for the rehabilitation of injured workers although this matter could be determined by arbitration. Table 5 of Appendix XVII gives details of workers' compensation cases handled during the year.

#### *Industrial Safety*

The provisions of the *Industrial Safety, Health and Welfare Ordinance 1961-1970* and the *Industrial Safety, Health and Welfare Regulations* provide a comprehensive industrial safety code and contain general provisions for all workers, except those engaged in mining who are covered by the *Mines and Works Regulations*.

Further provisions relating to safety are included in the *Papua New Guinea Electricity Commission Ordinance 1961-1962*.

Provision for the operation of tractors, earthmoving equipment and mobile cranes, to plantation spraying and earthworks, are specially provided for by 5 Orders and Declarations made by the Secretary for Labour. Particular reference to the procedures necessary in the use, construction and maintenance of ladders, erection of scaffolding, cranes and hoists used in building and construction works is contained in these Orders and Declarations.

Industrial Safety (Monocrotophos in Cacao Plantation) Order No. 1 of 1971 was introduced to safeguard personnel employed on spraying monocrotophos in cacao plantations.

The Technical Advisory Service of the Department of Labour provides advice and assistance to employers on physical and working conditions in industry covering industrial safety, lighting, ventilation, factory layout, siting of installations and safety precautions in workshops.

Registration and inspection of boilers and pressure vessels receives special attention.

Film screening and lectures on safety in industry are provided for industrial and work organisations. Safety pamphlets and posters have been obtained and distributed for display in factories.

The following statistics relate to the registration of factories, boilers and pressure vessels for the year ending 30 June 1972.

| <i>Papua New Guinea</i>   |       |
|---|-------|
| Number of Factories Registered ..                                       | 1,017 |
| Number of Factory Registrations Renewed .. .. .                         | 1,099 |
| Number of Permits to Operate Factories Issue .. ..                      | 12    |
| Number of Boilers Registered ..   | 9     |
| Number of Pressure Vessels Registered .. .. .                           | 165   |
| Number of Certificates of Inspection of Boilers/Pressure Vessels issued | 477   |

#### *Explosives*

The *Explosives Ordinance* 1953-1968 is administered by the Department of Labour. Initial and refresher training courses in the safety and handling of explosives for other departmental staff and personnel from private enterprise were conducted. Courses were held at Port Moresby, Lae, Rabaul, Madang and Bulolo. There were both Papua New Guinean and expatriate candidates and successful students were issued with permits to use explosives with restrictions where applicable.

The statistics of permits to use explosives and licences to store explosives are as follows:

|                               |     |
|-------------------------------|-----|
| Number of Permits Issued ..   | 109 |
| Number of Permits Renewed ..  | 128 |
| Number of Licences Issued ..  | 24  |
| Number of Licences Renewed .. | 23  |

#### *Inflammable Liquids*

The Department of Labour is responsible for administering the *Inflammable Liquid Ordinance* 1953-1967.

During the year 641 licences were issued to persons to keep inflammable liquid or dangerous goods in store, 24 premises were registered as premises where inflammable liquid or dangerous goods may be kept and 160 dispensing pumps were also registered.

Particular attention has been paid to the conveyance of inflammable liquid throughout Papua New Guinea. There were, during the year, 124 vehicles inspected and approved as suitable for this purpose.

Advice and assistance has been given to fuel suppliers in such matters as the installation of depots and the storage of inflammable liquid.

#### *Weights and Measures*

The administration of *Weights and Measures Ordinance* 1951 is the responsibility of the Department of Labour. The Deputy Chief Inspector (Weights and Measures) is responsible for rendering technical advice and assistance to businesses involved in trading and also provides technical advice in relation to metric conversion.

The construction and equipping of the Weights and Measures Standards Laboratory in Port Moresby has continued. Verifications of subsidiary and inspector's standards of mass, length and volume are being carried out.

#### *Metric Conversion*

A Commission was appointed on 2 March 1972 to plan, guide and facilitate conversion to the use of the metric system of weights and measures within Papua New Guinea with the aim that this should be effectively completed by the end of 1979.

Since the commencement of its activities the Commission has established advisory committees to advise on conversion in particular sectors and set up premises and facilities in Port Moresby.

Within each of the Committees specialist personnel have been appointed. Draft programmes in some sectors have already been prepared, while research is continuing in other sectors.

#### *Training*

Training of skilled workers is carried out by both administration and mission technical schools, colleges and by the Institute of Technology.

Trainees from technical schools fall into 2 main categories—those who qualify for apprenticeship and those who are suitable for employment where a lower level of skill is required. The minimum qualifications for entry into apprenticeship is successful completion of two years' secondary education. Trainees who do not become apprentices generally take employment as trade assistants or are engaged in lower level work in rural areas. Further details of technical, professional and sub-professional training are given in other relevant sections of this Report.

### Supervisory Training

Following an expert consultant's investigation of supervisory attitudes of Papua New Guineans in 1970, revised individual training courses in supervisory practice have been initiated. Assistance and advice are also given to organisations planning to establish their own internal programmes.

Training courses offered include:

1. *Basic Supervision.* This serves as a general introduction to the principles of supervision and helps make the trainees more aware of future problems they are likely to encounter. The course is intended for both potential supervisors and supervisors. Successful completion of the Basic Supervision course is considered an essential requirement before local supervisors can proceed to any of the advanced courses.
2. *Stage II Supervisory.* Selected supervisors with promotional potential undertake a course/courses requiring concentrated study on a selected segment of the Basic Supervisory course. Practical demonstration and experience is also provided.
3. On-the-job training workshops are provided at the request of the private sector. The aim of such assistance is to accelerate the training of local personnel and to introduce the basic principles of improved training techniques.

During 1971-72, 17 supervision courses were conducted in various parts of Papua New Guinea. A total of 183 supervisors attended courses.

### Apprenticeship

The Apprenticeship Ordinance provides for apprenticeships in specific trades leading to the granting of trade certificates. Apprenticeship training is controlled by an Apprenticeship Board which consists of 9 members and includes representatives of employer and employee organisations. To assist the Board in carrying out its functions the Department of Labour makes available the services of certain officers who provide the necessary administrative and technical expertise.

The apprenticeship scheme enables apprentices who complete their Indentures and pass their final trade examinations to gain recognition as skilled tradesmen.

*Categories of Trades.* On 20 December 1971 the Chairman of the Apprenticeship Board published a Determination, detailing the minimum educational qualifications required for entry into Apprenticeship training in the following 3 trade categories.

'Category A' and 'Category B'—apprenticeship trades for which an indenture period of 4 years duration shall be served and for which practical training is available or expected to be available in Papua New Guinea and for which supplementary training is provided by the Department of Education or such other organisations as are approved by the Department of Education in Papua New Guinea.

| <i>Apprenticeship Trade</i>                     | <i>Minimum Education Standard</i>     |
|---|---------------------------------------|
| <i>Category A</i>                               |                                       |
| Clerk   | } Satisfactory pass at Form III level |
| Electrician                                     |                                       |
| Mechanic (Aircraft)                             |                                       |
| Mechanic (Radio)                                |                                       |
| Printer (Compositor)                            |                                       |
| <i>Category B</i>                               |                                       |
| Boatbuilder/Shipwright                          | } Satisfactory pass at Form II level  |
| Carpenter/Joiner                                |                                       |
| Chef/Caterer                                    |                                       |
| Fitter (Diesel and Heavy Earthmoving Equipment) |                                       |
| Fitter/Machinist                                |                                       |
| Hairdresser (Ladies')                           |                                       |
| Mechanic (Business Machines)                    |                                       |
| Mechanic (Diesel)                               |                                       |
| Mechanic (Motor)                                |                                       |
| Mechanic (Refrigeration)                        |                                       |
| Plumber/Drainer                                 |                                       |
| Printer (Bookbinder)                            |                                       |
| Printer (Letterpress Machinist)                 |                                       |
| Printer (Lithographic)                          |                                       |
| Sheetmetal Worker                               |                                       |
| Steel Fabricator/Welder                         |                                       |
| Wood Machinist/Saw Doctor                       |                                       |

'Category C'—apprenticeship trades for which an indenture period of 3 years duration shall be served and for which practical training is available or expected to be available in Papua New Guinea and for which supplementary training is provided by the Department of Education or such other organisations

as are approved by the Board, and for which examinations are provided by the Department of Education in Papua New Guinea.

| <i>Apprenticeship Trade</i>      | <i>Minimum<br/>Education<br/>Standard</i> |
|----------------------------------|---|
| Baker                            | } Satisfactory pass<br>at Form II level   |
| Bricklayer/Plasterer/<br>Tilayer |   |
| Linesman (Electrical)            |   |
| Painter/Decorator/<br>Signwriter |   |
| Panel Beater/<br>Spraypainter    |   |
| Power station<br>operator        |   |

All courses of training, which have been approved by panels of experts in various trades, include both theoretical and practical work and are designed to suit the conditions of Papua New Guinea. Apprentices receive training at technical schools supplemented by on-the-job training and are encouraged to continue their general education in English and Mathematics.

During the year apprenticeship agreements were approved in each of the following trades:

Boatbuilder/Shipwright  
Carpenter/Joiner  
Chef/Caterer  
Clerk  
Electrician  
Fitter Machinist  
Hairdresser (Ladies')  
Linesman (Electrical)  
Mechanic (Aircraft)  
Mechanic (Business Machines)  
Mechanic (Diesel)  
Mechanic (Motor)  
Mechanic (Radio)  
Mechanic (Refrigeration)  
Painter/Signwriter/Decorator  
Panelbeater/Spraypainter  
Plumber/Drainer  
Printer/Bookbinder  
Printer/Compositor  
Printer/Lithographic  
Saw Doctor  
Sheetmetal Worker  
Steel Fabricator/Welder  
Wood Machinist

#### *Technical Training*

Satisfactory completion of trade and academic subjects at a technical college at Form IV level

entitles a student to a credit of one year from the period of apprenticeship.

Each apprentice subsequently attends a block course of training in each year of the remaining period of his indenture.

The Department of Labour provides apprentices with a travel authority once each year so that they may travel from the place of employment to a central technical college where they attend a block course, of approximately six weeks duration. On completion of each block course, apprentices are required, in their own time, to do a set number of revision and pre-block course preparatory lessons by correspondence study before being eligible to attend the next block course. Employers are required to pay apprentices full wages while they are attending block course.

#### *Scale of Wage:*

The *Apprenticeship (Temporary Provisions) (Wages) Regulations 1970* were amended on 10 December 1971. The following minimum wage rates payable to an apprentice were prescribed with effective date 1 January 1972:

#### *Apprentices in Category A Trades*

| <i>Year of<br/>Apprenticeship</i> | <i>Minimum<br/>Wage<br/>\$</i> |
|-----------------------------------|--------------------------------|
| 1 .. ..                           | 9.10                           |
| 2 .. ..                           | 11.75                          |
| 3 .. ..                           | 18.50                          |
| 4 .. ..                           | 22.50                          |

#### *Apprentices in Category B Trades*

| <i>Year of<br/>Apprenticeship</i> | <i>Minimum<br/>Wage<br/>\$</i> |
|-----------------------------------|--------------------------------|
| 1 .. ..                           | 9.00                           |
| 2 .. ..                           | 11.00                          |
| 3 .. ..                           | 17.50                          |
| 4 .. ..                           | 19.60                          |

#### *Apprentices in Category C Trades*

| <i>Year of<br/>Apprenticeship</i> | <i>Minimum<br/>Wage<br/>\$</i> |
|-----------------------------------|--------------------------------|
| 1 .. ..                           | 9.00                           |
| 2 .. ..                           | 11.00                          |
| 3 .. ..                           | 17.50                          |

There are 52 expatriate apprentices indentured under the Apprenticeship Ordinance in Papua New Guinea.

There are now 1,533 Papua New Guineans undergoing Apprenticeship training. A total of 1,481 Papua New Guinean apprentices have

completed their training, passed their final technical examinations and received certificates of completion of training.

#### *Indigenous Training Incentive Scheme*

The Indigenous Training Incentive Scheme is concerned with vocational training for commerce and industry. It is restricted to training Papua New Guineans, by and in the private sector. For the purpose of this scheme the private sector refers to all firms and bodies which are subject to the income tax laws, local government councils and non-profit non-governmental organisations. The provisions of the Indigenous Training Incentive Scheme were extended to include Christian Missions in July 1971. This decision was approved by the AEC after considering the amount and type of technical/industrial training undertaken by these bodies and the fact that these trained persons are eligible to seek employment in the public and private sectors.

Vocational training has been classified into 3 parts: Apprenticeship, Formal Institutional Training and 'Other Training'.

*Apprenticeship.* Employers undertaking the training of apprentices are assisted during the initial and less productive period of apprenticeship when they bear certain costs not normally carried by other employers nor by employers overseas—for example, tools, recreation leave, travel and accommodation.

*Formal Training.* It is desired to encourage private employers to sponsor students to Papua New Guinea formal training institutions. Each institution prescribes certain minimum costs of sponsorship—fees, board allowance, books and the like. Enrolments are now assisted to the extent of one-third of the basic costs of sponsorship for the first year of attendance in all instances and for the second year of attendance where the course is 3 or more years.

*Other Training.* The assistance given in the formal categories has been laid down in specific terms, but a more flexible approach is allowed for this category. An Indigenous Training Advisory Committee consisting of 5 persons (2 from the public service and 3 from the private sector), has been set up. This Committee advises the Minister for Labour on the areas, form and extent of assistance within this category.

The intention of the scheme is to lighten the burden of training for the employer and remove the grounds of excuse put forward by the non-training employer. At present 45

companies from the private sector are involved in the Scheme.

#### *Practical Training Scheme for Papua New Guineans in Australia*

The Practical Training Scheme is designed to enable Papua New Guineans who already have basic educational and vocational skills to upgrade the level of their skills and to advance more rapidly to positions of greater complexity and responsibility by undergoing a period of practical training in Australia. Selected persons go to Australia for short periods (up to 12 months) of mainly on the job training in their particular skill.

Government departments, private firms and training institutions in Australia provide the practical on-the-job training in areas where suitable training facilities are not available in Papua New Guinea.

In the period of this Report, 9 employees from private enterprise in Papua New Guinea went to Australia for training under the Scheme.

#### *Personnel Management and Practice Service*

This service acts as a reference authority on efficient personnel practices to the private sector by investigating and accumulating data on personnel practice within industry.

Stress is placed on assisting the implementation of localisation programmes within the private sector.

#### *Industrial Psychology Service*

With the increase of pace in localisation in both private and public sectors, activity is being directed towards practical advisory functions, assisting private companies and statutory authorities to review, improve, or introduce appropriate methods of selection, placement, and relate in-service training to individual needs in localisation.

Direct selection services are being provided to some private companies to ensure minimum wastage during training, and a joint consulting service on a range of organisation planning and personnel problems is available to both public and private organisations from the Personnel Advisory and Industrial Psychology Branches.

Research within Industrial Psychology is currently oriented towards introduction improvement and validity of trade and technical aptitude tests, and survey techniques for measuring effectiveness of training and localisation programmes.



### *Labour Advisory Council*

In October 1970 the Ministerial Member for Labour, Mr Toua Kapena, MHA, announced the formation of a Papua New Guinea Labour Advisory Council to advise the Administrator's Executive Council and the Administering Authority on labour matters generally. The council was formed to consider such matters as—

- (i) improving industrial relations.
- (ii) measures to improve productivity.
- (iii) trade union development.
- (iv) localisation of the Papua New Guinea work force and other matters such as changes in the employment situation, unemployment, under-employment and technological advancement.

The Labour Advisory Council is a consultative and advisory body and consists of the Minister for Labour as Chairman, the Secretary for Labour, 4 trade union representatives and four employer representatives appointed by the Administrator.

The council has held 3 meetings since its inaugural meeting in July 1971. During this time the Council has examined and passed resolutions on such matters as workers' housing, stevedoring operations, apprenticeship standards, effects of wage increases on employment in the rural sector of the country's economy and issues considered relevant for referral to a Minimum Wages Board.

### *International Labour Organisation*

Mr G. H. Cooper, International Labour Organisation Expert in apprenticeship, who was assigned to the department in February 1971 in connection with the United Nations Vocational and Industrial Training Project completed his assignment in December 1971. He was principally concerned with the training of apprenticeship supervisors and making recommendations with regard to certain aspects of apprenticeship training.

### *Freedom of Movement of Persons for Employment Purposes*

Subject only to provisions directed at regulating the employment of Papua New Guineans in certain areas, there is no restriction on the employment in Papua New Guinea. Permanent inter-territorial migration is insignificant and does not give rise to any shortage of labour in Papua New Guinea.

The *Migration Ordinance 1963-1969* controls all temporary absences of indigenous persons from Papua New Guinea. Indigenous persons may be employed outside of Papua New Guinea if adequate arrangements have been made for their welfare.

Indigenous inhabitants have adequate opportunities for employment in Papua New Guinea but a number have left for specified periods for purposes associated with their employment or for specialised training.

There is no provision under the labour legislation for a system of labour passes or work books.

### *Recruitment from outside Papua New Guinea*

The only non-European workers recruited from outside of Papua New Guinea are a limited number of professional and technical workers who are granted entry for restricted periods.

On 1 October 1971, the House of Assembly passed the *Employment Training and Regulation Ordinance 1971* which provides for prohibitions and restrictions on immigration for employment. Under this Ordinance a Notice of Intention to declare specified occupations prohibited or restricted for immigrants who arrived in Papua New Guinea after 1 May 1972 (the date of commencement of the Ordinance) was gazetted on 1 June. Following the 3 months period for the lodging of any objections, the Administrator's Executive Council may decide on a final Declaration.

### *Application of International Labour Organisation Conventions*

The following Conventions adopted by the International Labour Organisation and ratified by Australia have been extended to Papua New Guinea from the dates shown:

No. 7—Minimum Age (Sea) Convention 1920; 8 July 1959.

No. 8—Unemployment Indemnity (Shipwreck) Convention 1920; 6 November 1937.

No. 10—Minimum Age (Agriculture) Convention 1921; 8 July 1959.

No. 11—Right of Association (Agriculture) Convention 1921; 8 July 1959.

No. 12—Workmen's Compensation (Agriculture) Convention 1921; 31 January 1966.

- No. 18—Workmen's Compensation (Occupational Diseases) Convention 1925; 8 February 1961.
- No. 19—Equality of Treatment (Accident Compensation) Convention 1925; 8 February 1961.
- No. 27—Marking of Weight (Packages Transported by Vessels) Convention 1929; 6 August 1931.
- No. 29—Forced Labour Convention 1930; 2 January 1932.
- No. 42—Workmen's Compensation (Occupational Diseases) Convention (Revised) 1934; 8 February 1961.
- No. 45—Underground Work (Women) Convention 1935; 14 December 1954.
- No. 80—Final Articles Revision Convention 1946; 15 January 1952.
- No. 84—Right of Association (Non-metropolitan Territories) Convention 1947; 20 January 1968.
- No. 85—Labour Inspectorates (Non-metropolitan Territories) Convention 1947; 30 September 1954.
- No. 99—Minimum Wage Fixing Machinery (Agriculture) 1951; 31 March 1971.
- No. 105—Abolition of Forced Labour Convention 1957; 8 February 1961.
- No. 122—Employment Policy 1964; 12 November 1969.

#### *Compulsory Labour*

The Papua and New Guinea Act prohibits forced labour except in accordance with the Provisions of Conventions of the International Labour Organisation concerning forced and compulsory labour which have been adopted by Australia. The Native Administration Regulations provide for the compulsory planting and cultivation of food crops in an area which has been declared by the Administrator to be liable to a famine or deficiency in food supplies. Such work is excluded from the term 'forced or compulsory labour' by definition in Article 2 of International Labour Organisation Convention No. 29—Forced Labour. It was not necessary to so declare any area during the year. There are no other statutory provisions in respect of compulsory labour.

## CHAPTER 5

### SOCIAL SECURITY AND WELFARE SERVICES

#### *Ministerial Responsibility*

During the year under review the Papua New Guinea Ministry exercised full authority and final responsibility for all matters of social welfare which include child welfare; grants to voluntary agencies; social welfare assistance; pensions; aids to destitutes; undertaking services and cemeteries; and rehabilitation of offenders released from corrective institutions.

In the Second House of Assembly the Assistant Ministerial Member responsible for social development and home affairs was Mr Wesani Iwoksim, MHA. Responsibility for social security and welfare services in the Third House of Assembly is exercised by the Minister for the Interior, Dr John Guise, CBE, MHA.

#### *Legislation*

Provision for social security and welfare services of various kinds is contained in such ordinances as the *Child Welfare Ordinance* 1961-1968, the *Deserted Wives and Children Ordinance* 1951-1961, the *Poor Persons Legal Assistance Ordinance* 1951, the *Mental Disorders and Treatment Ordinance* 1960-1967, the *Corrective Institutions Ordinance* 1957-1963, the *Workers Compensation Ordinance* 1958-1967, the *Adoption of Children Ordinance* 1968, the *Adoption of Children (Customary Adoptions) Ordinance* 1969, and the *Reciprocal Arrangements Ordinance* 1968. Other legislation covers pensions or superannuation for officers of the Public Service, members of the Royal Papua New Guinea Constabulary and disabled ex-servicemen and their dependants.

#### *Organisation*

Most Papua New Guineans live within the social structure of their clan or sub-clan. These communities assume responsibility for the care of orphans, the aged and the infirm. Where, for some reason, the clan organisation is unable to provide adequate care, the Administration give support in the form of *ex gratia* allowances, which may be made in cash or in kind to the persons in need. The Child Welfare Ordinance authorises the Director of Child Welfare to grant similar assistance, in prescribed circumstances, for the support of

destitute children. In emergency situations, Welfare Officers are authorised to make issues of foodstuffs.

Low level charges are now made for outpatient and public ward treatment for Papua New Guinean patients at the Government hospitals. A higher scale of charges applies to treatment received in the intermediate and private wards. However, membership and benefits of certain Australian contributing hospitals and medical benefit funds are open to eligible persons. A special factory, operated by the Papua New Guinea Government, provides artificial limbs and appliances for the physically disabled.

A number of projects have been designed to assist the physically disabled and the handicapped. The Australian Red Cross Society conducts a physiotherapy centre for handicapped children in association with the Port Moresby General Hospital. The Cheshire Homes Foundation accommodates a small number of severely handicapped children from all parts of Papua New Guinea at its home, established near Port Moresby. A sheltered workshop for the rehabilitation of handicapped adults has been established at the Port Moresby General Hospital.

The Social Development Division of the Department of Social Development and Home Affairs has functional responsibility for welfare services, but is assisted by the Mental Health Division of the Department of Public Health and the Corrective Institutions Branch of the Department of Law which also perform welfare functions. Almoners are stationed at the Port Moresby Base Hospital.

At 30 June 1972 there were 41 Community Development Officers, 26 Trainee Community Development Officers and 8 Community Development Assistants stationed in district centres in New Guinea where they carry out group and individual welfare work. A further 21 Community Development Officers, 8 trainee Community Development Officers and 7 Community Development Assistants were carrying out their duties at district centres in Papua. A number of these officers are employed in the headquarters of the Division of Social Development. These include, in addition to the Assistant Secretary, Executive Officer and Training Officer, 3 Senior Community Development Officers engaged in specialist activities as youth work organiser, womens activities officer and child welfare

officer. The Senior Community Development Officer (youth work) has the oversight of all Government youth work in Papua New Guinea, and prepares training programmes for council-employed youth workers.

The Women's Activities Officer has responsibility for supervision of the Advancement of Women programme. The Senior Community Development Officer (Child Welfare) assists the Director of Child Welfare in all Child Welfare and adoption matters. Two social workers are employed by the Mental Health Division of the Public Health Department, whilst an occupational therapist is attached to the Port Moresby General Hospital.

Local government councils continue to take a growing interest in social welfare. Papua New Guinea councils are currently employing 50 Papua New Guinean welfare assistants. In addition, 12 council sponsored girls from Papua New Guinea are attending the training course at Ahioma and 20 the course at Kundiawa.

There are 8 youth workers employed by councils in Papua New Guinea. Councils finance the construction of community education centres, health clinics and women's clubs.

#### *Training of Welfare Personnel*

Applicants for the position of Community Development Officer, Grade 1 are required to have extensive experience in welfare work and either a leaving certificate or adult matriculation.

Traineeships for the position of Community Development Officers, Grade 1 are available for Papua New Guineans who satisfactorily passed Form IV, secondary education.

All trainees are now given 12 months' on-the-job training and then attend the Administrative College for a further year. A special course in social work has been included from the beginning of 1970. In addition, a limited number are selected for a 12 months' course at the South Pacific Commission's Home Economics Training Centre at Suva, Fiji. The University of Papua New Guinea has now commenced a degree course in Social Work. Four Papua New Guinean Community Development Officers are attending this course on council scholarships. Two former Community Development Officers are doing the course as Public Service cadets.

Two Papua New Guinean Community Development Officers are studying the second year of the Diploma in Administration Course.

One Papua New Guinean Community Development Officer is studying in Australia for a Diploma in Social Work.

Applicants for the position of Community Development Officer, Grade II are required to have either a Diploma in Social Studies or at least 4 years experience as a Community Development Officer.

Ahioma and Kundiawa Training Centres have provided training courses for young women employed by Councils. In a number of Districts Community Development Officers have conducted short courses for welfare assistants, club leaders and the like.

There have been 7 week long courses to train young men as multi-purpose village youth workers. Currently there are 8 of these youth workers employed by local government councils. Their task is to establish youth committees, stimulate sports and teach simple skills such as the care of tools, repairs to bicycles and tyre changing and mending. Nearly 100 villages throughout Papua New Guinea have established youth committees.

#### *Child Welfare*

The *Child Welfare Ordinance 1961-1971*, makes comprehensive provision for the welfare of all children. It provides for the establishment of a Child Welfare Council, Children's Courts, the approval and establishment of institutions for the care of neglected or delinquent children, for allowances to destitute children, and for various other matters relating to the welfare of children. Until early in 1969, the ordinance made provision for the adoption of children, but these sections have been superseded by the *Adoption of Children Ordinance 1971*, and by the *Adoption of Children (Customary Adoptions) Ordinance 1969*.

This latter Ordinance gives Papua New Guinean people the right to seek recognition of a customary adoption by a Local Court, if they so desire, and for the issue of a certificate, setting out the custom relating to adoption, at the time the application was made. Provision is also made for the certificate to be varied if custom changes. The legislation was passed, with the unanimous approval of the House of Assembly.

The Director of Child Welfare Council, consisting of the Director of Child Welfare, a Welfare Officer, 2 representatives of the Missions, a legal officer of the Public Service, an Inspector of Police, a representative of

the Department of Education, and 5 other members, 2 of whom must be women, was formed in April 1962, in accordance with the requirements of the ordinance. The council meets at 3 monthly intervals, and submits an annual report to the Minister, and the House of Assembly, on the working of the ordinance, and other matters relating to child welfare.

Grants-in-aid may be made, at the discretion of the Director of Child Welfare, to voluntary agencies in respect of social workers employed full time on child welfare in institutions approved under the Child Welfare Ordinance. A maximum of \$800 per annum per worker may be allowed.

#### *Juvenile Delinquency*

There is a noticeable increase in juvenile delinquency in the growing towns. Though not of alarming proportions, this increase has caused the Papua New Guinea Government and other welfare agencies to take corrective action. In particular, there is a greater need for rehabilitation of the small group of delinquents, who are beyond parental control, and who become wards of the Director of Child Welfare.

Most of these are satisfactorily rehabilitated by placement with Christian missions, where they attend school, or are given some appropriate vocational training. The Salvation Army operates a Farm School at Sogeri near Port Moresby, and the Catholic Mission of the Divine Word operates a Boy's Town, near Wewak on behalf of the Government.

The Rotary Club of Goroka is constructing an institution to be known as 'Togatia House' at Goroka. This will be a rehabilitation centre with an agricultural emphasis. The Papua New Guinea Government is also giving financial aid to this project.

None of these institutions caters for the small group of hardened recalcitrants. Rehabilitation of this group will be part of the task of an institution which the Government has decided to construct near Port Moresby. It is hoped that construction will begin in the 1971-72 financial year.

These corrective measures are, of course, complemented by preventive measures, such as youth clubs, expansion of sporting facilities, employment agencies, vocational guidance and so on, which are referred to elsewhere in this Report. Nevertheless, the fact that there is an increase in juvenile delinquency, as urbanisation develops faster than job opportunity, cannot be denied.

### *Conferences and Research*

Quarterly meetings of the Child Welfare Council considered a wide range of subjects, including adoption, probation, institutions, handicapped children, employment of children and preventive work.

A considerable amount of social research is being carried out in Papua New Guinea; the long-term programme of the New Guinea Research Unit of the Australian National University and that of the University of Papua New Guinea, as well as the findings of many independent research workers, provide the Administration and other agencies with data necessary for the development of acceptable programmes in all fields. The 'Welfare Quarterly', a journal covering the principal welfare and community development activities of the Papua New Guinea Government, has been published since July 1963.

A regular Social Change Advisory Conference of senior Papua New Guinea Government officers, and other specialists, will be instituted shortly. This body will advise the Government on social implications of policy and legislation proposals, and on the social effects of specific developmental projects. The aim is to maintain a watch on economic and political progress, so that the social consequences are kept before the notice of Government.

Attempts are being made to develop statistics, by which social, as well as economic development, can be measured. The Bureau of Statistics is taking the lead in the research and development of this project, assisted by economic and social specialists. The work of the United Nations Research Institute for Social Development, has been found very useful in planning this project.

### *Council of Social Services*

Although established in Papua, the Council of Social Services comprises representatives of Missions and voluntary agencies with branches and interests throughout New Guinea. The Council, which has been operating since 1960, serves as a co-ordinating agency in the field of social welfare, carries out modest research projects, and presses for remedial action where problems occur. It has set up permanent committees to pursue a continuous assessment of youth problems, accommodation, employment and general social conditions.

The Council is affiliated with the Australian Council of Social Services which has granted \$1,000 towards any projects the local council may wish to mount.

The Papua New Guinea Government, which makes an annual grant of \$400 to the group, has one representative on the council, and values its advice and the contribution it makes to informing public opinion on social welfare problems. It also serves as a valuable training ground for a number of Papua New Guineans, who attended as representatives of various organisations.

## CHAPTER 6

### STANDARDS OF LIVING

Conditions and stages of advancement vary greatly throughout Papua New Guinea from new suburban communities and semi-urbanised villages near towns to remoter areas so recently brought under control that the people's way of life is only now changing. In these circumstances it could be misleading to generalise and a survey of the overall standard of living is not yet practicable. The important factors in this connection are that in most areas the people have ample land for their own food requirements, and the numbers receiving cash incomes, whether from wages or individual or communal enterprise, are increasing.

When living under traditional conditions the people of Papua New Guinea obtain most things they need, such as food, fuel, cooking utensils and building material, either directly from their own efforts or by barter. Most of the people still gain a basic livelihood in this way outside the towns, but an increasing number are participating in a widening economic system, especially those who are fully employed in working for wages and those who are mainly occupied in raising cash crops.

One of the first results of Papua New Guinea Government contact has been the adoption of steel working tools. This enables Papua New Guinean farmers to clear larger areas for gardens, to cultivate them better and thereby increase production. As soon as possible after a new area has been opened up, officers of the extension service of the Department of Agriculture, Stock and Fisheries carry out agricultural patrols in these new areas and distribute planting material and assist and encourage people to adopt

improved methods of agriculture. This usually leads to a further increase in production and a surplus for sale, the proceeds of which are used to buy manufactured goods.

The extensive activities of local government councils, rural progress and co-operative societies, and the development of cash cropping and other forms of commercial activity are indications of rapidly improving living standards.

Standards of health and social welfare are rising; particular attention is being paid to nutrition and hygiene, the elimination of disease, the extension of education, and training in more efficient and productive techniques.

Clothing standards are improving; western types of clothing and footwear have been widely adopted.

The housing standards of the Papua New Guinean people continue to improve. Well-designed dwellings built of permanent materials are gaining in popularity. The improvement in social and economic conditions is also indicated by the number of Papua New Guineans who have acquired motor vehicles and power-driven vessels.

Two deleterious results of the increased mobility of the population, and the trend to urbanisation are:

- (a) Excessive consumption of alcohol, and,
- (b) Growth of 'squatter' settlements in and around the major towns.

It is becoming increasingly evident that excessive drinking is a main cause of many social problems in the towns. The matter is causing such concern that there have been several debates on the subject in the House of Assembly. A Commission of Enquiry into Alcoholic Drink was appointed in 1971-72 and its report has been published. Its conclusions are being studied.

Unfortunately, Papua New Guinea is not escaping the world wide problem of slum growth, associated with urban development. However, the problem in this country is manageable, if sufficient resources are applied to it early enough. At the moment, the problem is not under control by any means, although expected.

The Department of Social Development and Home Affairs and the Housing Commission are working together to this end. Some results have been achieved and new policies are being evolved in the light of the experience gained.

Particulars of the average cost of staple foodstuffs, clothes and domestic items in principal centres are contained in Appendix XVI.

## CHAPTER 7

### PUBLIC HEALTH

#### *Ministerial Responsibility*

During the year under review the Papua New Guinea Ministry exercised full authority and final responsibility in respect of all Public Health matters.

The Ministerial Member for Health in the Second House of Assembly was Mr Tore Lokoloko, MHA. In the Third House of Assembly the Minister for Public Health is Dr Reuben Taureka, MHA.

#### *General*

The Minister for Health in the Papua New Guinea House of Assembly presented a report on the activities of his department for the year 1971-72. Extracts of this report are reproduced below.

*Foreword by the Minister for Health.* It is my pleasure to present to you the 1971-72 Annual Report of the Department of Public Health.

During the past year there has been a considerable improvement in liaison and co-operation between this department and the Missions engaged in health work. A unity of purpose is developing amongst the agencies responsible for providing health services. Particularly welcome has been the active participation in the field of community health by the Defence Force in Papua New Guinea.

However, the development of health services cannot be allowed to remain static. As education increases there is a growing awareness, amongst Papua New Guineans, of the benefits of Western medicine. Demands for health services can be expected to increase proportionately. At present the more vocal demands tend to come from urban areas. It must be remembered, however, that the greater part of the population lives in the rural areas and it is to be expected that this rural population will demand health services of a standard similar to those available in towns. The need for a review of policy on the development of rural health services is clear.

I look forward to the early completion of the National Inventory of Health Resources. This inventory will provide the basic data important to the preparation of a comprehensive National Health Plan. Such a plan is essential to ensure the maximum and most efficient utilisation of health resources in this country where the demand for health services will always exceed the resources available.

It is my Government's policy to promote localisation at all levels of the Public Service. Within the Department of Public Health, I consider it important that priority continue to be given to the training of all categories of health personnel.

I can see a need for better recognition of the status of graduates from paramedical training institutions. Paramedical training has proved particularly relevant to Papua New Guinea and the provision of career incentives is important to encourage young people to enrol for this type of training. Nursing education has received considerable attention in recent years. Despite an increased intake, the numbers leaving the profession following graduation remain high. This problem requires further study.

Aid post orderlies continue to provide most of the primary medical care in rural areas and there is a growing demand for their services. My department will continue to train aid post orderlies, and I hope their conditions of service will be reviewed shortly.

Finally, I want to ensure that everything possible is done to encourage school leavers to choose careers in public health—as health education and the prevention of disease are important to the development of Papua New Guinea.

#### *The Director's Review*

*National Health Plan.* The need for a comprehensive National Health Plan became more evident during the year as:

- (i) the gap widened between resources and demands for health services;
- (ii) some health programmes faltered; and
- (iii) professional decision-making gave way before the views of the people and politicians.

A comprehensive National Health Plan will carefully determine priorities for health action and ensure the best utilisation

of resources to meet the health problems and needs of the people. This health plan will be integrated with the National Development Plan covering all aspects of social progress and economic advancement for Papua New Guinea. The peoples' demands for health services and needs will always exceed by far the resources available. Planning will make sure these limited resources are used effectively and efficiently.

Work continued during the year to meet World Health Organisation prerequisites for health planning. The National Inventory of Health Resources and the collection of basic data are almost complete as the important steps to build an objective basis for health planning. Preliminary action was taken to establish a Health Planning and Epidemiology Unit. Planning has been assisted by a consultant from the Christian Medical Commission of the World Council of Churches, and short-term World Health Organisation consultants.

*District Health Officers.* The District Health Officer is the key link in the long chain for the delivery of health services. As a Health Administrator, his role covers the adaptation and implementation of national health policies which require the efficient utilisation of district resources for health action and the mobilisation of community support for the health services. He creates a productive environment for health programmes through planning, organisation and good management. The district health officer is the leader of a large health team comprising doctors, dentists, pre-school teachers, health extension officers, nurses, health inspectors, aidpost orderlies and other health workers. During the year action was taken:

- (i) to provide more information to district health officers relevant to their work; and
- (ii) to use more the knowledge and experience of district health officers for the development of new health policies and procedures.

*Information and Participation.* Field visits by Papua New Guinea headquarters professional and administrative staff increased during the year. Selected documents and papers were distributed monthly throughout Papua New Guinea, including division/section 'Activity Reports'. As well conference reports have been distributed more widely along with the occasional publication (Selected

Papers on National Health Planning) and new bulletins on communicable diseases and staff matters. Apart from keeping district health officers well informed about the Government, their department, and health matters, these documents are selected to encourage feedback.

District health officers have taken leading roles in the preparation of Basic Health Action documents covering tuberculosis and leprosy control, health inspection, dental health, venereal diseases control, immunisation programmes, prevention of endemic cretinism, and the aidpost system. Primarily directed at district health officers, these basic documents flow from a restatement and clarification of policy to realistic objectives and targets for health action, standardised procedures, and any professional/administrative information necessary for the effective delivery of health services. Through continuing action these documents will become eventually an operations manual for district health officers. As well, district health officers participated in workshops reviewing the school health services and laboratory services and helped prepare a 'Manual for Quarantine Officers'. Participation by field staff at national level has improved health services and programmes.

*Definition of the Role of Health Workers.* The Health Department embarked on a course of action:

- (i) to define clearly the role of the district health officer;
- (ii) to set down in detail the duties and responsibilities of these key health administrators;
- (iii) to increase their professional and administrative authority . . . with increased decision making within districts and a closer working relationship with Councils and area authorities; and
- (iv) to do everything possible to strengthen their position. District health committees are being established in all districts to bring Government and Church health workers together regularly to discuss district health problems and needs and to work together to provide the best possible health services within available resources.

*Tuberculosis and Leprosy Control.* During the year district health officers were given greater responsibility for tuberculosis and leprosy control services. Effective control measures for these two important chronic endemic diseases require, in addition:

- (i) a continuing review of policies and procedures and supervision and assistance from specialists;
- (ii) area teams for surveys, problem solving, and special investigations as directed by specialists; and
- (iii) the involvement of as many health workers as possible (or the integration of the tuberculosis and leprosy control services within the general health services).

The full impact of these changes may not become evident for some time.

*Management.* The 1971 District Health Officers Conference was preceded by a Management Seminar conducted by the Administrative College. Health administrators were introduced to 'Management by Objectives' as a management approach for the improvement of health services. Then followed a week of discussions, led by the district health officers themselves, on health problems and programmes. Modern management techniques are important for the best use of the limited resources available for health against the overwhelming demands and needs for health services.

*Church Health Services.* The Executive, Combined Churches Medical Council, met twice during the year with Senior Health Department officers. Church health workers attended senior staff conference meetings and participated actively in district health committees, workshops to review national health policies and procedures, and the preparation of basic health documents referred to above. Without any large increase in assistance to these health services, there has developed a closer working relationship between the Church and Government in health matters. The future relationship of the Church and Government in health will be one important action area during the preparation of the National Health Plan over the next year. During the year action began to rationalise health services in areas where there has been competition between Churches and between the Church and the Government in the provision of health services.

*Conclusions.* Preliminary action during the year should lead to greater action by health workers in nutrition education and family health and encourage the development of national nutrition and population policies. With economic development stimulating agricultural and industrial activities, a need is developing



for an occupational health service. The Department of Public Health is a large organisation with more than 7,700 people employed on any day, capital assets in 18 district hospitals alone approaching \$14½m, and an annual budget for 1971-72 of \$15.5 million. Changing the direction of such a large organisation is difficult and takes time but during the year the Health Department veered deliberately towards policies and action designed to make better use of the nation's resources for the care and rehabilitation of the sick, prevention of disease and the promotion of health . . . action illustrating this direction change includes national health planning, the forging of a partnership between the Church and Government in health matters, the continuing redefinition and review of health policies and procedures associated with increased flexibility to meet change effectively, increased decision making at district level by well-informed health administrators, measures to improve management and accelerate localisation, and the rationalisation of health services in various areas. Relevance and reality are two elements essential to change for the effective and efficient development of health services.

#### *Administrative Services Division*

There are 3 organisational divisions of the department. For functional organisation the department is divided into the Division of Administrative Services, the Division of Medical Services, Training and Mental Health and the Division of Community Health.

The Administrative Services Division is designed to service professional divisions, and comprises 7 sections: Personnel, Finance, Office Services, Health Services, Planning and Statistics, Land and Buildings and Internal Audit.

#### *Personnel Section*

*Training.* Several officers of the Administrative Services Division attended courses on supervision, introductory management, middle and senior management and management by objectives at the Administrative College, Port Moresby. The College also conducted special courses for Departmental field officers visiting Port Moresby.

Three local officers are undertaking the Public Service Higher Certificate Course and one other officer is attending a 3-month course under the Commonwealth Practical Training Scheme at the Australian School of Pacific Administration, Sydney. One officer is

attending the Diploma in Administration Course at the Administrative College, and 2 female officers are undertaking the Library Assistant Course at the same centre. Three officers continued their full-time studies at the University of Papua New Guinea.

*Localisation.* A Papua New Guinean officer has been appointed as officer-in-charge of the Local Office Staff Section, supervising 24 local and 2 overseas staff clerks. It is the intention to localise this section fully during this financial year. The Staff Registry Section of 12 officers is fully manned by local officers.

#### *Staff by Categories as at 30 June 1972*

|   | Overseas   | Local        |
|---|------------|--------------|
| Medical Practitioners ..                    | 122        | 52           |
| Dental Officers and Dental Therapists .. .. | 17         | 53           |
| Nurses, Registered and Enrolled             | 250        | 676          |
| Health Extension Officers ..                | 49         | 132          |
| Health Inspectors .. ..                     | 14         | 24           |
| Pharmacists .. ..                           | 16         | ..           |
| Pre-school Teachers .. ..                   | 20         | 14           |
| Clerks and Clerical Assistants              | 184        | 287          |
| Housekeeping Services ..                    | 37         | 223          |
| Trainees .. ..                              | ..         | 924          |
| Orderlies .. ..                             | ..         | 1,640        |
| Typists .. ..                               | 55         | 10           |
| Classified Health Staff ..                  | 96         | 779          |
| <b>Total .. ..</b>                          | <b>860</b> | <b>4,814</b> |

#### *Comparison of Numbers of Staff by Status for the Years Ended 30 June 1971 and 30 June 1972*

| Status   | 30 June 1971 | 30 June 1972 |
|--|--------------|--------------|
| <b>Local staff—</b>                                |              |              |
| Officers and employees ..                          | 3,497        | 3,890        |
| Trainees .. ..                                     | 768          | 924          |
| Public servants .. ..                              | 65           | 65           |
| Labourers, nursing aides and aid post orderlies .. | 1,937        | 1,937        |
| <b>Total .. ..</b>                                 | <b>6,267</b> | <b>6,816</b> |
| <b>Expatriate staff—</b>                           |              |              |
| Permanent officers ..                              | 145          | 126          |
| Contract officers .. ..                            | 243          | 268          |
| Temporary employees ..                             | 455          | 446          |
| Part-time employees ..                             | 27           | 20           |
| <b>Total .. ..</b>                                 | <b>870</b>   | <b>860</b>   |

The expatriate staff serving with the department decreased by 10 during the year, whilst there was an increase of 549 local officer public servants.

Nine hundred and twenty-four students are undergoing training in various departmental training institutions. Ten medical graduates from Australian Universities commenced their residence in Government hospitals.

The Department still operates a Local Officer Personnel and Salary Section at Lae for the 4 mainland districts. Regular tours of inspection of all districts are undertaken by officers of the headquarters and Lae offices. A Staff Information Bulletin is now published by the headquarters Personnel Section in an endeavour to advise all officers of their entitlements and any variations to their conditions of service.

*Salary Section.* It is proving extremely difficult to attract and retain local officers in this section, although the department recognises the urgent need to employ only local officers. Some officers attended special courses during the year, designed to improve machine operation and calculating methods.

*Establishment and Methods Section.* The Establishments Section has not been fully operative during the year due to lack of staff and staff on leave. The section has been mainly involved with a major review of the Medical Training Branch with the aim of providing the establishment necessary for the intended Paramedical Training College, Port Moresby. The section is currently being expanded to provide effective establishment control and to perform regular critical reviews of sections and divisions during each fiscal year. Priorities have been allocated to several major areas within the Department and it is intended that a programme of establishment and method reviews will be laid down to cover the 1972-73 fiscal year.

*Finance Section.* Total Papua New Guinea Government expenditure on health and allied services in 1971-72 increased by \$2,264,868 or 11 per cent over 1970-71 expenditure. Revenue from services provided by the department increased by \$49,201 or 7.3 per cent over the amount received in 1970-71.

The major increases were in the areas of salaries, hospital and medical supplies and general services. The general services sector was increased by the addition of 2 new votes to cover pre-school building subsidies and the expenses associated with the compilation of a National Inventory of Health Resources as well as increased expenditure on supplies for material and child health, tuberculosis surveys and the training of students.

Project votes have been operated successfully for the past 2 years by the Port Moresby General Hospital and the Malaria Service. This type of funding will be expanded in future years.

*Office Services Section.* This section embraces the functions of central registry, typing services, publications and the headquarters library. Localisation is proceeding rapidly within this section. With the exception of the Officer-in-Charge of the Registry, all positions are now occupied by local officers.

*Health Services Section.* This section has been consolidated during the past year. As the name implies, it was created to supply servicing functions for other divisions within the department.

Its functions include payment of subsidies to missions and local government councils providing health services, the development of Hospital Boards of Advice and Hospital Auxiliaries, the revision of policies relating to hospital and medical charges, and the processing of nominations for officers proceeding on overseas study programmes.

The section disburses almost a million dollars annually in subsidy payments and provides information and statistics on which to base proposals for policy changes and legislative amendments.

*Planning and Statistics Section.* This section works with the Epidemiologist producing National Health Statistics, compiling and updating a National Inventory of Health Resources, and undertaking preparatory work for National Health Planning. A full report on the work of the section is shown under the 'Health Planning and Epidemiology' Section.

*Land and Buildings Section.* Capital works projects totalling 3,950,922 were on the approved Capital Works Programme for 1971-72. Of this amount \$3,479,746 was allocated for services and \$471,176 for training/accommodation. The Minor New Works Programme for 1971-72 involved projects totalling \$153,272.

In November 1971, a Committee reviewed the Capital Works Programme of the Department for the period 1971-72/1974-75 relating major building projects, as far as possible, to the priority needs of the department and the national health policies and programmes of Papua New Guinea.

The Lands and Buildings Section recently commenced preliminary work to compile an

Assets Register of all health institutional buildings throughout the country.

A Register is being established of all land that has been set aside for the Department of Public Health, to confirm whether the land has been, or is going to be, utilised by the department, or should be forfeited.

*Internal Audit Section.* The internal audit staff spent approximately 25 per cent of their time on internal audit duties during 1971-72

and 75 per cent on investigational work and preventive action. Audit activities were conducted in the field as well as at headquarters.

Current planning provides for the organisation of the audit section with an increase in staff. A comprehensive audit programme is at present being drawn up for the guidance of the internal audit staff, taking into consideration the offer from Treasury Department to provide advice and assistance in training audit staff and preparation of audit programmes.

TABLE 1  
FUNCTIONAL ANALYSIS OF DEPARTMENTAL EXPENDITURE

|                             | Adminis-<br>tration | Community<br>health | Medical<br>services | Medical<br>training | Total      |
|-----------------------------|---------------------|---------------------|---------------------|---------------------|------------|
| Expenditure .. .. .         | 753,510             | 4,434,116           | 8,129,212           | 1,173,736           | 14,490,574 |
| Percentage of total .. .. . | 5.2                 | 30.6                | 56.1                | 8.1                 | 100.0      |

TABLE 2  
REVENUE RAISED BY DEPARTMENT OF PUBLIC HEALTH

|                                 | 1967-68 | 1968-69 | 1969-70 | 1970-71 | 1971-72 |
|---------------------------------|---------|---------|---------|---------|---------|
| Hospital and medical .. .. .    | 295,707 | 332,528 | 442,880 | 637,442 | 685,497 |
| Sales of medical stores .. .. . | 6,656   | 6,254   | 5,316   | 10,094  | 9,603   |
| Dental .. .. .                  | 14,487  | 13,233  | 15,843  | 27,958  | 29,595  |
|                                 | 316,850 | 352,015 | 464,039 | 675,494 | 724,695 |

TABLE 3  
COMPARISON OF ANALYSIS OF EXPENDITURE  
(Based on Department of the Treasury Figures)

|   | 1970-71    | 1971-72    | Percentage<br>change |
|---|------------|------------|----------------------|
| Salaries—   |            |            |                      |
| Wages and overtime .. .. .  | 6,982,628  | 7,912,400  | 13.3                 |
| Administrative expenses—  |            |            |                      |
| Travel, patrolling, library office equipment and general administrative expenses .. .. .                      | 2,188,507  | 2,254,812  | 3.0                  |
| Hospital and medical services—  |            |            |                      |
| Drugs, stores training and educational materials, dental supplies, hospital and medical equipment .. .. .     | 2,335,769  | 2,638,273  | 13.0                 |
| Mission medical services—   |            |            |                      |
| (1) Grants to Mission General Hospital medical staff .. .. .  | 542,387    | 579,255    | 6.8                  |
| (2) Subsidies to leprosy and tuberculosis hospitals .. .. .   |            |            |                      |
| Hygiene and malaria control—  |            |            |                      |
| Malaria eradication, assistance to local government council health services, environmental sanitation .. .. . | 799,968    | 826,031    | 3.3                  |
| General services—   |            |            |                      |
| Disease surveys, consultants, maternal and child health, pre-schools, blood transfusion .. .. .               | 198,579    | 279,803    | 40.9                 |
| Faculty of Medicine .. .. .   | 183,355    | ..         | ..                   |
|   | 13,231,193 | 14,490,574 | 9.5                  |

TABLE 3—continued  
EXPENDITURE BY OTHER DEPARTMENTS AND AGENCIES  
ON BEHALF OF THE PUBLIC HEALTH DEPARTMENT

|  | 1970-71    | 1971-72    | Percentage change |
|--|------------|------------|-------------------|
| Capital Works—   |            |            |                   |
| Buildings, water supplies and sewerage .. .. .         | 2,319,155  | 2,886,981  | 2.4               |
| Maintenance of—  |            |            |                   |
| Water supplies, sewerage, hospital engineering .. ..   | 1,285,138  | 1,250,238  | -2.8              |
| Institute of Human Biology grant .. .. .               | 125,000    | 140,000    | 12.0              |
| Total administration expenditure on health services .. | 16,960,486 | 18,767,793 | 10.6              |
| Overseas allowances—                                   |            |            |                   |
| Salary .. .. .   | 3,439,311  | 3,864,228  | 12.4              |
| (Commonwealth Budget) leave fares .. .. .              | 129,532    | 162,176    | 25.2              |
|  | 20,529,329 | 22,794,197 | 11.0              |

### Health Planning and Epidemiology

The activities of this section have seen a marked upsurge in the 1971-72 year. The section now handles work in the following areas:

1. National Health Statistics
2. National Inventory of Health Resources
3. Epidemiological Surveillance and Assessment
4. Preparatory work for National Health Planning

#### National Health Statistics

This section deals with the compilation and analysis of hospital and health centre statistics, covering both outpatients and inpatients. Special surveys are designed and implemented.

These have included a national survey of malnutrition and a national survey of dangerous animals and plants. Statistics on many aspects of health in Papua New Guinea are collected and collated.

Some 10 per cent of deaths occur in hospitals or health centres and thus the above statistics represent the pattern found in these centres. It is noteworthy that deaths from heart conditions are being increasingly reported and deaths from pneumonia are decreasing in actual number and as a percentage of all deaths. Pneumonia and diarrhoeal diseases together account for nearly a quarter of all recorded deaths.

TABLE 1  
LEADING CAUSES OF DEATH IN GOVERNMENT HOSPITALS FOR YEARS ENDING  
31 MARCH 1970 AND 1971

| Underlying cause of death   | Number |       | Percentage |        |
|---|--------|-------|------------|--------|
|   | 1970   | 1971  | 1970       | 1971   |
| All causes .. .. .  | 2,843  | 3,171 | 100.00     | 100.00 |
| Pneumonia .. .. .   | 459    | 437   | 16.14      | 13.78  |
| Enteritis and other diarrhoeal diseases .. .. .                                     | 250    | 343   | 8.79       | 10.81  |
| Malignant neoplasms, including those of lymphatic and haematopoietic tissue .. .. . | 171    | 182   | 6.01       | 5.73   |
| Meningitis .. .. .  | 136    | 150   | 4.78       | 4.73   |
| Malaria .. .. .   | 115    | 139   | 4.04       | 4.38   |
| Tuberculosis—All forms .. .. .  | 134    | 128   | 4.71       | 4.03   |
| Accident, poisonings and violence .. .. .   | 118    | 125   | 4.15       | 3.94   |
| Immaturity .. .. .  | 102    | 103   | 3.58       | 3.24   |
| Diseases of the heart .. .. .   | 96     | 135   | 3.37       | 4.26   |
| Malnutrition .. .. .  | 103    | 80    | 3.62       | 2.52   |
| Other causes .. .. .  | 1,159  | 1,385 | 40.76      | 43.67  |

**TABLE 2**  
**LEADING CONDITIONS TREATED IN GOVERNMENT HOSPITALS FOR YEARS ENDING**  
**31 MARCH 1970 AND 1971**

| Principal conditions treated                            | Number  |         | Percentage |        |
|---|---------|---------|------------|--------|
|   | 1970    | 1971    | 1970       | 1971   |
| All conditions .. .. .                                  | 134,253 | 145,920 | 100.00     | 100.00 |
| Pneumonia .. .. .                                       | 19,038  | 17,147  | 14.18      | 11.75  |
| Enteritis and other diarrhoeal diseases .. .. .         | 12,297  | 14,043  | 9.15       | 9.68   |
| Malaria .. .. .   | 9,934   | 12,334  | 7.39       | 8.45   |
| Normal delivery .. .. .                                 | 9,077   | 10,634  | 6.76       | 7.28   |
| Bronchitis .. .. .                                      | 6,308   | 6,356   | 4.69       | 4.35   |
| Lacerations and open wounds .. .. .                     | 5,310   | 6,211   | 3.95       | 4.25   |
| Skin infections (excluding chronic skin ulcers) .. .. . | 5,567   | 5,947   | 4.14       | 4.07   |
| Chronic skin ulcers .. .. .                             | 2,636   | 3,268   | 1.96       | 2.23   |
| Fracture of limbs .. .. .                               | 2,524   | 2,890   | 1.88       | 1.98   |
| Tuberculosis .. .. .                                    | 2,311   | 2,444   | 1.72       | 1.67   |
| Other conditions .. .. .                                | 59,251  | 64,646  | 44.13      | 44.30  |

**TABLE 3**  
**AVERAGE NUMBER OF BEDS OCCUPIED IN GOVERNMENT HOSPITALS FOR TEN**  
**LEADING CONDITIONS FOR YEARS ENDING 31 MARCH 1970 AND 1971**

| Principal conditions treated                          | Number |       | Percentage of all beds |        | Percentage of beds other than TB or leprosy |       |
|---|--------|-------|------------------------|--------|---|-------|
|   | 1970   | 1971  | 1970                   | 1971   | 1970  | 1971  |
| All conditions .. .. .                                | 6,843  | 6,868 | 100.00                 | 100.00 | ..  | ..    |
| Tuberculosis .. .. .                                  | 1,398  | 1,276 | 20.42                  | 18.57  | ..  | ..    |
| Leprosy .. .. .                                       | 1,191  | 1,113 | 17.40                  | 16.20  | ..  | ..    |
| Pneumonia .. .. .                                     | 459    | 425   | 6.50                   | 6.18   | 10.78                                       | 9.48  |
| Enteritis and other diarrhoeal diseases .. .. .       | 242    | 278   | 3.53                   | 4.04   | 5.68  | 6.20  |
| Normal delivery .. .. .                               | 240    | 284   | 3.50                   | 4.13   | 5.64  | 6.34  |
| Skin infections (excludes chronic skin ulcer .. .. .) | 185    | 182   | 2.70                   | 2.64   | 4.34  | 4.06  |
| Malnutrition .. .. .                                  | 168    | 176   | 2.45                   | 2.56   | 3.94  | 3.92  |
| Lacerations and open wounds .. .. .                   | 184    | 192   | 2.68                   | 2.79   | 4.32  | 4.28  |
| Fracture of limbs .. .. .                             | 165    | 148   | 2.41                   | 2.15   | 3.87  | 3.30  |
| Chronic ulcer of skin .. .. .                         | 166    | 193   | 2.42                   | 2.41   | 3.90  | 4.30  |
| Other conditions .. .. .                              | 2,445  | 2,601 | 35.72                  | 37.87  | 57.47                                       | 58.07 |

The total number of patients being treated is rising steadily. More deliveries are taking place in hospital and occupying an increasing percentage of available beds. The rises in lacerations and open wounds and chronic skin ulcers are of interest.

Pneumonia, diarrhoeal diseases, particularly in the under 5-year olds, and malaria remain major health problems.

As the policy of domiciliary treatment is increasingly implemented, both tuberculosis and leprosy patients are occupying a smaller percentage of the total number of hospital beds.

#### *National Inventory of Health Resources*

During the year work to establish a National Inventory of Health Resources was almost finished. The National Inventory of Health Resources is a complete record of all hospitals, health centres, aid posts and health workers from Government, mission, council and private sectors. It is being compiled to provide an accurate, centralised record of all health facilities throughout Papua New Guinea which can then be used as an aid to National Health Planning and for general management within the department.

Data on personnel and institutions have been collected from every district and converted to a computer-usable form for processing by the Electronic Data Processing Section of the Public Service Board on the Government computer. The data stored in the computer file will be continuously updated as changes occur, and a revised set of tables will be produced annually, with the exception of departmental staff postings which will be produced quarterly.

*Epidemiological Surveillance (Epint) and Assessment*

Up until 30 June 1972, 120 hospitals and health centres reported each month by telegram giving the number of cases of communicable disease seen in their centre for the month, but this is being increased from 1 July to 180 centres. The pattern of such diseases is thus followed continuously, and the reports are summarised and published every month. Continuous evaluation of disease is carried on in the section with regular updating as disease patterns change.

A new publication the 'Epidemiological Review' is published quarterly. This is aimed at the middle-level health worker and its purpose is to keep him up to date on the important diseases in this country.

*Preparatory Work for National Health Planning*

The section is producing a 120,000-word volume on the diseases and health services of Papua New Guinea as a preparatory work for National Health Planning. Contributions have been sought from many medical workers throughout Papua New Guinea.

*Pharmaceutical Services*

The aim of the Pharmaceutical Services Section is to provide all departmental and mission health workers with the medical supplies they need to be effective in their work, at the place and at the time they need them.

*Pharmaceutical Stores.* The section's main function is to organise the purchase and distribution of supplies to 6 major stores throughout Papua New Guinea. Every effort is made to purchase goods on the world market in order to take advantage of fluctuating prices and regional variations in cost. Continual sampling and testing ensures that quality is maintained under this system.

The 6 regional stores at Port Moresby, Lae, Rabaul, Mount Hagen, Wewak, and Madang are responsible for the receipt and acquittal of medical supplies, and for distribution to individual hospital and health centres. Each of these stores is managed by a pharmacist who is also responsible for the bulk manufacture of some 30 medicaments.

AREAS SERVED BY REGIONAL STORES

| Stores                         | Districts served   | Population |
|--------------------------------|--|------------|
| <i>Base Medical Stores</i>     |  |            |
| Port Moresby ..                | All Districts of Papua except the Southern Highlands and Northern Districts ..   | 415,000    |
| *Lae .. ..                     | Morobe, Eastern Highlands and Chimbu Districts and Northern District of Papua .. | 731,000    |
| Rabaul .. ..                   | East New Britain, West New Britain, New Ireland, Manus and Bougainville ..       | 330,000    |
| <i>District Medical Stores</i> |  |            |
| Mount Hagen ..                 | Western Highlands and Southern Highlands ..                                      | 532,000    |
| Wewak .. ..                    | East Sepik and West Sepik ..   | 272,000    |
| Madang .. ..                   | Madang .. ..   | 180,000    |

\* This Store also clears and consigns all cargo for the only inland medical store at Mount Hagen.

*Technical Service.* The section also provides, through its technical branch, an engineering and maintenance service for more than 100 X-ray units of varying sizes and models, for a cobalt therapy unit, for a wide range of anaesthetic equipment and electro-medical apparatus and, as of this year, also for dental equipment. During the year 2 major X-ray plants were purchased and installed by officers of the technical branch at the new Arawa Hospital on Bougainville and at Nonga Base Hospital in Rabaul, the latter hospital's machine having reached the end of its useful life.

A modern Artificial Limb Factory at Lae provides both limb prostheses and protective footwear for leprosy patients and manufactures crutches for use throughout the country's hospitals and health centres.

*Staff and Staff Training.* The section maintains a pharmacist in each of 4 major hospitals, namely Port Moresby, Lae, Rabaul and Goroka.

A notable event during the year was the transfer of a pharmacist from this section to the Medical Training Division for the purpose of establishing a training course for dispensers. The aim of the course is to produce officers capable of taking over the medical supply functions of dispensaries in each district hospital, as well as assuming responsible duties in medical stores.

An event worthy of mention was the third post-war Conference of Departmental Pharmacists at which every aspect of the section's functions was thoroughly discussed and many important decisions and recommendations were made. These included the introduction of uniform office procedures in all medical stores, with a centralised invoice acquitting system to facilitate quick localisation. With the same view in mind, the conference considered and, after revision, adopted a training manual for storemen drafted by the headquarters staff of the section. It covers in detail every aspect of physical storekeeping in the department's medical stores and has since been published.

The Conference also resolved that the medical supply service should place greater emphasis on helping all clients in their problems and on maintaining a close working relationship with all health workers.

The section is also responsible for keeping poison and other relevant legislation up to date, and for carrying out inspections of business premises throughout the country.

STATISTICAL DATA

|                                   | 1969-70     | 1970-71     | 1971-72     |
|-----------------------------------|-------------|-------------|-------------|
| Purchasing indents raised         | 1,684       | 1,925       | 3,053       |
| Value of purchases ..             | \$1,752,000 | \$1,968,000 | \$2,189,000 |
| Requisitions processed            | 21,574      | 27,025      | 25,870      |
| Issues by ship (in cubic tons) .. | 841         | 1,921       | 1,336       |
| Issues by air (in lb) ..          | 329,731     | 263,722     | 213,217     |
| Issues by road (in lb) ..         | 841,782     | 996,501     | 850,087     |

### Health Education

The Health Education Section of the Department of Public Health is involved in health education services, training, research and the production of health education teaching materials.

*Health Educators.* There are now district health educators in 14 districts. These district health educators devote a great deal of time to conducting training courses in health education for other health workers, and also carry out health education surveys and investigations. Other important aspects of the work of district health educators include health teaching in urban and rural communities and assisting with the health education aspects of special health programmes. Most sections of the Department of Public Health have developed health education programmes suited to their requirements. A full-time health educator

has been appointed to the Malaria Section to develop health education services within the malaria programme.

The fourth course of studies for the Diploma in Health Education was conducted during the year. Seventy-four participants have now completed these courses, and graduates from the diploma courses are now working as lecturers in teachers' colleges and health training institutions. They are also working in Church agencies welfare services and in several health promotion programmes.

Health education materials, for which there is a constant demand, are produced at the Institute of Health Education, Port Moresby. A catalogue of health teaching charts is available and these charts are widely distributed and used throughout the country. Workers in several other countries also use the health education teaching materials produced at the Institute.

*Community Health Education.* Health education principles are applied in areas of demand, responsibility and development. Under demand come the health education activities concerned with health knowledge, sensitization and motivation connected with personal and community health needs. Under responsibility come the health education activities concerned with personal and community action connected with health practices. Under development come the health education activities concerned with investment for increasing the potential for future progress in health development. Increased emphasis is now being placed on more community responsibility for health and medical care. Home medicine is being introduced and families are being encouraged to accept responsibility for elementary medical care in the home.

*School Health Education.* Good progress has been made in school health education. Health education syllabi for primary standards 1 and 2 have been introduced into the schools. The syllabus for primary standard 3 has been pre-tested and is now being printed ready for introduction into the schools in 1973. Draft health education syllabi have been prepared for primary standards 4, 5 and 6. It is expected that all primary grades will be teaching the new health education syllabus by 1974. Health education is taught in all teachers' colleges and 7 teachers' colleges have lecturers specially trained in school health education. During the year a workshop in school health education was held at the Institute of Health Education. This workshop was

attended by a representative from every teachers' college in the country.

### *Medical Services, Medical Training and Mental Health Division*

There have been no major changes in policy or unforeseen developments within this division during the last year. The year has been largely one of implementing and consolidating policy changes introduced late in the previous year.

The Division of Medical Training has continued all previous courses and introduced one new post-graduate course—the Diploma in Community Health. Plans are well advanced for the training of dispensers and the introduction of a diploma course in Health Administration.

Within the Medical Services Division, Arawa Hospital was completed and occupied just prior to the end of the financial year. With the appointment of specialist staff early in the next financial year, the residents of this new industrial complex will have a hospital service appropriate to their needs. During the year construction commenced on new district hospitals at Kimbe and Mendi and major reconstruction of the Port Moresby General Hospital. These events indicate the pressures for improvement of existing hospitals particularly in the rapidly-developing urban areas where facilities often fail adequately to meet demand.

The Division of Mental Health continued its previous activities during the year with increased emphasis on visits by its social workers. The appointment of a part-time medical officer to the Psychiatric Unit at the Port Moresby General Hospital improved supervision of patients admitted to this unit.

#### *Recruitment and Posting of Medical Officers.*

Minimal problems were experienced with medical officer recruitment during 1971-72, although some categories continued in short supply. Currently the main problem is to obtain sufficient experienced district health officers and hospital superintendents for the major hospitals. This problem is unlikely to be overcome until local graduates are qualified and experienced to fill these positions. A disturbing trend was the continued increase of medical officers at hospitals in urban areas and a reduction of medical officers in rural areas. It is doubtful if this

trend can be halted, let alone reversed, in the near future. Few expatriate officers will accept appointment to rural areas, and the need to accelerate the training of local graduates in clinical and public health specialties involves posting them to the larger centres.

The output of medical graduates from the Faculty of Medicine is still grossly inadequate to meet the needs of Papua New Guinea and the country will have to rely on continuing overseas recruitment for many years. The Pre-Registration Committee continued to meet regularly throughout the year. Problems are being encountered in providing residents with appropriate experience in some clinical disciplines. Representation of the Faculty of Medicine on the Pre-Registration Committee has been formalised. The Post-Graduate Committee and its Education Sub-committee meet regularly, and are concerned with the post-graduate education of all medical officers. Apart from advising the department and individual medical officers on career development, the committee receives Government and external finance to assist in conducting refresher courses and financing overseas travel mainly to attend professional conferences.

*Localisation.* With the trend towards early internal self-government and subsequent independence, the Department of Public Health continues to promote localisation, particularly of the senior administrative medical officer positions, and the training of medical officers in the clinical specialties. Four senior headquarters positions are now occupied by local officers (3 medical officers and 1 dentist), and the present Minister for Health is a former headquarters medical officer. The first local medical officer was registered as a clinical specialist during the year and several others are at an advanced stage of training.

The First Assistant Director (Medical Services and Training), in association with the First Assistant Director (Community Health), is actively involved in international health, and is primarily concerned with overseas training—World Health Organisation fellowships and the Commonwealth Practical Training Scheme, the South Pacific Commission and the Commonwealth Medical Conference.

#### *Medical Services*

The major function of the Medical Services Division is to provide, in Papua New Guinea, hospitals for the care and rehabilitation of the



sick and injured. The standard and size of hospitals, the number of beds, the technical equipment and staffing with medical personnel are based on the health needs of the individual districts, and depend on the size of the population and the economic, social and political state of development. While base hospitals are characterised by more sophisticated facilities and equipment, and the availability of specialist medical officers and other technically-skilled staff, district hospitals provide comprehensive medical and nursing care, X-ray and laboratory facilities, and the large district hospitals (Madang, Wewak, Mount Hagen and Arawa) have specialist medical officers.

The Radiotherapy Centre, Angau Memorial Hospital, Lac, equipped with a Theratron 80 cobalt unit, was established during the year, and the first patient was treated on 6 May 1971. The centre is capable of handling all patients requiring radiotherapy. It was officially opened on 2 June 1972 by the Minister for Health, Dr R. Taureka. The centre was established on the premise that approximately 1,000 new cases of cancer would be registered each year and that approximately 50 per cent of these would need radiotherapy as all or part of their treatment. In 11 months, 124 major malignancies from all districts have been treated and, extrapolated on this basis, 135 are likely to be treated in a full year, which is short of the postulated figure. A caesium ward has been completed and was opened during the year. It is managed conjointly by the Angau Memorial Hospital and the Radiotherapy Centre.

Arawa Hospital, the new Bougainville District Hospital, was opened for occupancy on 29 June 1972. It is an up-to-date hospital accommodating 208 beds, and was completed at a cost of approximately \$3.7m. This hospital replaced the old Kieta Hospital which has been closed. The Loloho Health Centre has also been closed and Panguna Hospital has become a town clinic.

*Laboratory Services in Papua New Guinea.* There has been a continuing increase in the demand for laboratory investigations at an estimated rate of about 20 per cent per year in the larger hospitals. Visits were made by senior medical technologists to a number of smaller district hospitals to provide in-service training for laboratory staff. Visits such as this are a practical way of improving the standards of small laboratories. Training of

laboratory personnel remains a priority of the Pathology Department of the Port Moresby General Hospital. There are about 25 trainees in the 3-year certificate course. Training in Australian pathology laboratories under the Commonwealth Practical Training Scheme continued: 2 officers completed this training in 1971-72, and 2 others are at present in training.

A Workshop was held during May in Port Moresby to discuss a National Health Laboratory Service organisation. The main recommendation from this Workshop was the provision of a fully-integrated national health laboratory service which will provide a stable structure for laboratories throughout Papua New Guinea. It will also include essential epidemiological surveillance facilities for communicable diseases, and will ensure a standard and uniform training programme for all categories of laboratory workers.

The Tumour Registry, which had its beginning in 1956, was originally under the control of one person, but during the period under review the Director appointed a Committee to administer it. The Tumour Registry is collecting, registering and maintaining information on all notified cancer cases in Papua New Guinea. It is located in the Pathology Section of the Port Moresby General Hospital.

*Transfer of Patients to Australia.* Although improved medical services, on the one hand, have undoubtedly reduced the number of transfers considerably, nevertheless it is still necessary to transfer patients to Australia at Government expense, where life is endangered or treatment cannot be provided in Papua New Guinea. Visits from overseas of cardiologists and ear, nose and throat specialists, have affected the number of patients transferred to Australia because facilities are not available in this country to carry out the required treatment or surgery. Since early 1972, however, closed cardiac surgery has been performed at the Angau Memorial Hospital, Lac, and this has reduced the number of transfers for heart surgery.

Ambulances are stationed at all main district centres. There are growing demands from other centres, but ambulances unfortunately cannot be made available to them owing to limited funds. During the year, 10 vehicles were purchased, 8 as replacements and 2 as additions. The departmental fleet of ambulances now totals 28.

*The Pharmaceutical Advisory Committee.* This Committee, in existence since 1959, was reconvened in 1970:

- (i) to relate departmental purchase of drugs, dressings and basic equipment to the needs of health services and to the qualifications of health workers using these medical supplies;
- (ii) to ensure that the Health Department makes the best use of available funds for the purchase of drugs, dressings and equipment;
- (iii) continually to revise the medical stores catalogue;
- (iv) to ensure that the department takes into account recent advances in medicine when purchasing medical supplies; and
- (v) to consider all suggestions from every health worker concerning the medical stores catalogue and medical supplies generally. In 1971-72 the committee held 6 meetings, during which the need for a wide

range of catalogue items was reviewed, including anaesthetics, analgesics, anticonvulsants, dermatological preparations, medical oxygen and ophthalmological preparations.

#### *Hospitals*

The general hospital is defined as an establishment, permanently staffed by at least 2 medical practitioners, which offers medical and nursing care to inpatients and provides a comprehensive range of services for diagnosis and treatment. Usually there is only one hospital in a district, in order to concentrate resources. The special hospital provides inpatient medical and nursing care primarily for one disease or group of diseases or patients, e.g. leprosy, tuberculosis, maternity or psychiatry.

The distribution of hospitals administered by the department throughout Papua New Guinea, is shown in Table 1, below:

TABLE 1  
HOSPITALS ADMINISTERED BY THE DIVISION OF MEDICAL SERVICES

| Hospital                                       | District           |
|--|--------------------|
| <b>Base Hospitals—</b>                         |                    |
| Port Moresby General Hospital .. .. .          | Central            |
| Angau Memorial Hospital, Lae .. .. .           | Morobe             |
| Goroka Base Hospital .. .. .                   | Eastern Highlands  |
| Nonga Base Hospital, Rabaul .. .. .            | East New Britain   |
| <b>District Hospitals—</b>                     |                    |
| Mount Hagen .. .. .                            | Western Highlands  |
| Mendi .. .. .                                  | Southern Highlands |
| Kundiawa .. .. .                               | Chimbu             |
| Vanimo .. .. .                                 | West Sepik         |
| Wewak .. .. .                                  | East Sepik         |
| Madang .. .. .                                 | Madang             |
| Kimbe .. .. .                                  | West New Britain   |
| Arawa .. .. .                                  | Bougainville       |
| Kavieng .. .. .                                | New Ireland        |
| Lorengau .. .. .                               | Manus              |
| Alotau .. .. .                                 | Milne Bay          |
| Popondetta .. .. .                             | Northern           |
| Kerema .. .. .                                 | Gulf               |
| Daru .. .. .                                   | Western            |
| <b>Special Hospitals—</b>                      |                    |
| Laloki Psychiatric .. .. .                     | Central            |
| Gemo Tuberculosis and Leprosy .. .. .          | Central            |
| Bitapaka Tuberculosis and Leprosy .. .. .      | East New Britain   |
| Anelaua Leprosy .. .. .                        | New Ireland        |
| Ubuia Tuberculosis and Leprosy .. .. .         | Milne Bay          |
| Raihu Tuberculosis and Leprosy .. .. .         | West Sepik         |
| Togoba Tuberculosis and Leprosy .. .. .        | Western Highlands  |
| Hatzfeldhaven Tuberculosis and Leprosy .. .. . | Madang             |
| Butaweng Tuberculosis and Leprosy .. .. .      | Morobe             |
| Mapoda Leprosy .. .. .                         | Western            |
| Embogo Tuberculosis and Leprosy .. .. .        | Northern           |

*Major Works.* An amount of \$800,000 was allocated for major hospital works to be carried out in the 1971-72 financial year, which included the projects shown in Table 2.

*Hospital Improvements:* An amount of \$80,000 was made available for improvements to hospitals during the year, which included the projects shown in Table 3.

TABLE 2  
MAJOR WORKS PROGRAMME 1971-72

| Hospital             | Project   |
|----------------------|---|
| Port Moresby .. .. . | 1. Commencement of construction of the new multi-storey wing of outpatients ward block and clinical science building.<br>2. Construction of a new students' dormitory block.<br>3. Alterations and additions to Ward 4. |
| Nonga Base .. .. .   | Alterations to students' accommodation classrooms.  |
| Goroka .. .. .       | Construction of additional nurses' quarters.  |
| Mount Hagen .. .. .  | Construction of new nurses' and student nurses' accommodation blocks.   |
| Mendi .. .. .        | Stage I of construction of the new Mendi District Hospital.   |
| Kundiawa .. .. .     | Completion of new nurses' accommodation block.  |
| Madang .. .. .       | Construction of male dormitory block for the Paramedical College  |
| Kimbe .. .. .        | Stage I of construction of the new hospital.  |
| Kerema .. .. .       | Stage II of construction of the new Kerema District Hospital.   |

TABLE 3  
MINOR WORKS PROJECTS 1971-72

| Hospital                                  | Improvements/Minor New Works   |
|---|--|
| Port Moresby General Hospital ..          | Extensions to Pathology Section  |
| Nonga Base Hospital, Rabaul ..            | Alterations to Central Sterilizing Department block; construction of nursery.                |
| Community Health Centre, Rabaul           | Completion of Stage 3 of the project. Construction of Stage 4.                               |
| Mount Hagen Community Hospital            | Construction of additional wards; improvements to nursery wing.                              |
| Laloki Psychiatric Hospital, Port Moresby | Improvements to water supply.  |
| Bitapaka (Kokopo), East New Britain       | Improvements to toilet/ablution block.   |
| Kimbe District Hospital .. ..             | Construction of three 8-bed wards.   |
| General Hospital, Madang .. ..            | Miscellaneous improvements to laundry, night duty facilities and staff sick bay.             |
| Angau Memorial Hospital, Lae ..           | Alterations to obstetric ward; alterations to caesium ward.                                  |
| District Hospital, Kundiawa ..            | Construction of new kitchen, laundry, morgue and pathways; renovations of malnutrition ward. |

TABLE 4  
STATISTICS FOR BASE HOSPITALS\* FOR THE YEAR ENDING 31 MARCH 1972

| Name of hospital      | District             | Population served | Number of beds | Bed occupancy rate | Total admissions for year | Daily average inpatients | Total number of outpatients treated | Daily average of outpatients |
|-----------------------|----------------------|-------------------|----------------|--------------------|---------------------------|--------------------------|-------------------------------------|------------------------------|
|                       |                      |                   |                |                    | Per cent                  |                          |                                     |                              |
| Port Moresby General  | Central .. ..        | 172,000           | 487            | 83                 | 13,711                    | 397                      | 214,462                             | 587                          |
| Angau Memorial, Lae   | Morobe .. ..         | 254,000           | 397            | 80                 | 9,200                     | 310                      | 86,877                              | 238                          |
| Nonga Base, Rabaul .. | East New Britain ..  | 103,000           | 452            | 81                 | 8,381                     | 274                      | 74,699                              | 204                          |
| Goroka General .. ..  | Eastern Highlands .. | 238,000           | 291            | 68                 | 6,526                     | 232                      | 55,344                              | 151                          |

\* Base hospitals provide service to their respective districts and are the referral hospitals for other districts in the region.

TABLE 5

## STATISTICS FOR DISTRICT HOSPITALS FOR THE YEAR ENDING 31 MARCH 1972

| Name of hospital | District              | Population served | Number of beds | Bed occupancy rate | Total admissions for year | Daily average inpatients | Total number of out-patients treated | Daily average of out-patients |
|------------------|-----------------------|-------------------|----------------|--------------------|---------------------------|--------------------------|--------------------------------------|-------------------------------|
|                  |                       |                   |                | Per cent           |                           |                          |                                      |                               |
| Mount Hagen ..   | Western Highlands ..  | 334,435           | 193            | 95                 | 5,948                     | 183                      | 23,588                               | 69                            |
| Mendi ..         | Southern Highlands .. | 204,500           | 130            | 85                 | 3,249                     | 112                      | 8,723                                | 120                           |
| Kundiawa ..      | Chimbu ..             | 189,365           | 177            | 95                 | 6,471                     | 168                      | 10,518                               | 27                            |
| Vanimo ..        | West Sepik ..         | 100,887           | 57             | 85                 | 725                       | 46                       | 10,838                               | 42                            |
| Wewak ..         | East Sepik ..         | 205,939           | 354            | 65                 | 4,854                     | 194                      | 37,433                               | 160                           |
| Madang ..        | Madang ..             | 178,016           | 280            | 80                 | 4,542                     | 224                      | 56,569                               | 155                           |
| Talasea ..       | West New Britain ..   | 59,207            | 60             | 66                 | 912                       | 40                       | 12,494                               | 35                            |
| Kieta ..         | Bougainville ..       | 78,741            | 118            | 80                 | 2,756                     | 96                       | 16,746                               | 46                            |
| Kavieng ..       | New Ireland ..        | 52,387            | 140            | 70                 | 2,112                     | 90                       | 16,252                               | 61                            |
| Lorengau ..      | Manus ..              | 22,805            | 96             | 60                 | 1,900                     | 54                       | 15,744                               | 42                            |
| Alotau ..        | Milne Bay ..          | 109,294           | 86             | 62                 | 583                       | 46                       | 7,127                                | 20                            |
| Popondetta ..    | Northern ..           | 60,900            | 80             | 75                 | 2,108                     | 52                       | 46,536                               | 150                           |
| Kerema ..        | Gulf ..               | 72,673            | 130            | 68                 | 1,145                     | 95                       | 10,973                               | 119                           |
| Daru ..          | Western ..            | 66,399            | 140            | 80                 | 1,365                     | 112                      | 16,598                               | 63                            |

TABLE 6

## STATISTICS FOR SPECIAL HOSPITALS FOR THE YEAR ENDING 31 MARCH 1972

| Name of hospital              | District             | Population served | Number of beds | Bed occupancy rate | Total admissions for year | Daily average inpatients | Total number of out-patients treated | Daily average of out-patients |
|-------------------------------|----------------------|-------------------|----------------|--------------------|---------------------------|--------------------------|--------------------------------------|-------------------------------|
|                               |                      |                   |                | Per cent           |                           |                          |                                      |                               |
| Laloki Psychiatric ..         | Central ..           | 172,000           | 90             | 90                 | 99                        | 81                       | 107                                  | 10                            |
| Gemo T.B./Leptosy ..          | Central ..           | 172,000           | 200            | 85                 | 195                       | 170                      | 2,400                                | 25                            |
| Bitapaka T.B./Leptosy ..      | East New Britain ..  | 103,000           | 300            | 93                 | 250                       | 279                      | 260                                  | 1                             |
| Ubuia T.B./Leptosy ..         | Milne Bay ..         | 109,294           | 200            | 50                 | 116                       | 98                       | 572                                  | 2                             |
| Raihu T.B./Leptosy ..         | West Sepik ..        | 100,887           | 300            | 53                 | 62                        | 160                      | 3,972                                | 35                            |
| Togoba T.B./Leptosy ..        | Western Highlands .. | 334,435           | 400            | 50                 | 158                       | 200                      | 29                                   | 1                             |
| Hatzfeldhaven T.B./Leptosy .. | Madang ..            | 178,016           | 134            | 50                 | 253                       | 68                       | 4,294                                | 12                            |
| Butaweng T.B./Leptosy ..      | Morobe ..            | 254,000           | 450            | 33                 | 282                       | 150                      | 18,832                               | 43                            |
| Enibogo T.B./Leptosy ..       | Northern ..          | 60,900            | 140            | 40                 | 125                       | 56                       | ..                                   | ..                            |
| Mapodo Leptosy ..             | Western ..           | 66,399            | 54             | 80                 | 34                        | 44                       | 1,527                                | 5                             |
| Anelaua Leptosy ..            | New Ireland ..       | 52,387            | 138            | 40                 | 20                        | 55                       | ..                                   | ..                            |

*Medical Training*

The continued use of news media and talks in schools and through the Government radio broadcasting service, once again yielded a good response from boys and girls seeking entry to nursing and paramedical courses. A total of 189 young men and women entered nurse courses this year compared with 184 in the previous year. Forty-one enrolled in the training course for health extension officers and 18 in the health inspector course.

*Nursing Education.* The Health Department and the Nursing Council jointly held a workshop to review the syllabus for post-basic psychiatric nurse training in February 1972 and the post-basic midwifery syllabus was also revised during the year. Curricula for all other nursing courses including a new course for enrolled community health nurses were finalised and approved by the Nursing Council. With the introduction of enrolled community health nurse training, 2 streams of

enrolled nurses will be prepared, one primarily for hospital work and the other for community health work. Currently community health nurse training at the enrolled level is conducted only by mission training schools.

In-service nursing programmes of one year's duration are conducted at Port Moresby General Hospital in paediatric nursing and theatre nursing, and for outpatient officers and nurse anaesthetists.

The Nursing Council considered possible requirements for enrolled nurses who desire to become registered nurses and recommend that they should have:

- (i) a satisfactory pass in the enrolment examination;
- (ii) Form III educational standard with C-level passes in Maths and English;
- (iii) a satisfactory supervisor's report; and
- (iv) a minimum of 12 months' additional training in an approved registered nurse training institution.

**BASIC NURSING PROGRAMMES CONDUCTED BY THE DEPARTMENT OF PUBLIC HEALTH**

| Course                             | Duration | Educational Entry requirements                         | Where conducted   |
|------------------------------------|----------|--|---|
| Registered Nurse .. ..             | 3 years  | Form III 'C' Level<br>Mathematics,<br>English, Science | Port Moresby  |
| Enrolled Hospital Nurse ..         | 3 years  | Form II  | Port Moresby, Rabaul, Lae, Goroka, Wewak<br>Mount Hagen in 1973   |
| Enrolled Community Health<br>Nurse | 3 years  | Form II  |   |
| Nursing Aide .. ..                 | 1 year   | Standard 6   | Port Moresby, Rabaul, Lae, Goroka, Tari,<br>Kieta, Wewak, Mendi, Madang, Lorengau,<br>Mount Hagen, Daru |

**POST-BASIC NURSING PROGRAMMES CONDUCTED BY THE DEPARTMENT OF PUBLIC HEALTH**

| Course            | Duration  | Entry requirement                         | Where conducted         |
|-------------------|-----------|---|-------------------------|
| Midwifery.. ..    | 1 year .. | Nursing Council enrolment or registration | .. Rabaul, Port Moresby |
| Psychiatric .. .. | 1 year .. | Nursing Council enrolment or registration | .. Laloki, Port Moresby |

This recommendation will receive further consideration before being implemented.

The first post-graduate Diploma Course in Community Health commenced in January 1972. This course was designed to prepare registered nurses and health extension officers for supervisory roles within the community health services. A WHO resident staff member assisted with the planning and conducting of this course. Ten health extension officers and 8 nurses are participating in the first course.

*Paramedical Training.* A total of 92 health extension officers and 50 health inspectors are under training at the Madang Paramedical College. Activities affecting paramedical training during the past year were the Third Curriculum Review Workshop on Health Extension Officer Training, held at the Paramedical Training College, Madang, and the appointment of committees to determine functions of health inspectors in urban and rural areas.

The training of health inspectors in the rural health section at Bogia is now well established. There are plans to develop training in urban health at Port Moresby instead of the practice, hitherto, of moving trainees from one urban area to another.

*Aid Post Orderly Training.* Early in the year the important decision to recommence training of aid post orderlies was made. A new school has been established at Mount Ambra in the Western Highlands District. Candidates

with Standard 6 education will undergo a 1-year full-time course followed by another year of supervised experience at a health centre. A new syllabus has been drawn up for the course and 44 students are currently receiving training. Under the new scheme of training, local government councils sponsoring candidates are required to make financial contributions for the training of candidates from their areas.

*WHO Assistance.* Professor F. J. Bennett, WHO Consultant in Paramedical Training, spent 2 months at Madang and Kainantu at the departmental training institutions and a month at Port Moresby, and visiting the newly-established Aid Post Orderly Training School at Mount Ambra. Professor Bennett, in consultations with teachers at the Paramedical training institution, has prepared draft amendments to the syllabi for health extension officer, health inspector and aid post orderly training.

WHO Consultants in Medical Education, Dr R. Weidershiem and Professor N. C. Kagan, revisited Papua New Guinea during the year. They conducted workshops at Madang and Port Moresby in which teachers of nurses and paramedical students participated. A further visit by these consultants has been requested.

At the department's request Professor D. Allbrook, WHO Consultant in Human Biology to the Faculty of Medicine, University of Papua New Guinea, spent a month visiting

and advising on the teaching of human biology subjects at nurse and paramedical training institutions. In conjunction with the teachers at Lae School of Nursing, Professor Allbrook has prepared a draft booklet for the teaching of human biology.

Dr Peter Cardew, WHO Consultant in Medical Illustration to the Faculty of Medicine and Department of Public Health, has been assessing needs for teaching materials for paramedical and nurse training and it is hoped that useful material will be produced at the Medical Illustration and Materials Production Unit jointly sponsored by the Department of Public Health and Faculty of Medicine.

*Future Planning.* Planning is well advanced for a course leading to the Diploma in Health Administration. This 1-year course will prepare managers for hospitals and health centres. A WHO health administrator, who arrived in April 1972 will advise and assist the department in the setting up and conducting of the first course.

A training course for dispensers will be commenced during the next financial year. On completion of training the dispensers will be attached to the pharmacies of larger hospitals and to base medical stores to provide much-needed staff for the Pharmaceutical Supply Section of the department.

It is planned to bring all basic, post-basic and post-graduate courses taught in Port Moresby under one institution to be named Paramedical College, Port Moresby. This will permit better co-ordination of the courses taught and will effect economies by enabling classes in the core subjects to be shared by students of the various courses which have these subjects in common. When fully established, the college will be offering about 20 different courses.

Important strides in paramedical and nursing education were made during the last year. Curricula for basic and post-basic nurse training have been finalised. Aid post orderly training has been recommenced and a post-graduate diploma course in community health has been introduced. Existing paramedical training was strengthened by advice from a number of WHO consultants and planning is well advanced for new courses. Training has received increasing attention and continues to be accorded a high priority in the allocation of departmental resources.

#### HEALTH COURSES CONDUCTED BY THE DEPARTMENT OF PUBLIC HEALTH

| Course                                  | 1972 student intake            | Total number of students as on 30.6.72 | Numbers graduated between July 1971 and June, 1972 |
|---|--------------------------------|--|--|
| Malaria courses ..                      | 62                             | 62                                     | 33   |
| Dental Technician ..                    | 5                              | 11                                     | 1  |
| Dental Therapist ..                     | 17                             | 27                                     | 4  |
| Enrolled Nurses ..                      | 144                            | 539                                    | 105  |
| Registered Nurses ..                    | 45                             | 105                                    | 7  |
| Health Extension Officer ..             | 41                             | 92                                     | 18   |
| Health Inspector ..                     | 18                             | 50                                     | 8  |
| Medical Technologist ..                 | 12                             | 24                                     | 2  |
| Radiographers ..                        | 5                              | 12                                     | 0  |
| Pre-School Teachers ..                  | 14                             | 27                                     | 4  |
| Dental Officer ..                       | 0                              | 8                                      | 3  |
| Medical Officer ..                      | 19 + 13<br>prelim.<br>students | 70 + 13<br>=83                         | 0  |
| Psychiatric Nursing<br>(Post-Basic) ..  | 8                              | 8                                      | 8  |
| Health Education ..                     | 0                              | 0                                      | 21   |
| Midwifery ..                            | 24                             | 24                                     | 10   |
| Diploma in Community<br>Health ..       | 18                             | 18                                     | 0  |
| Aid Post Orderly ..                     | 47                             | 44                                     | 0  |
| HEALTH COURSES CONDUCTED BY MISSIONS    |                                |  |  |
| Enrolled Nurses ..                      | 104                            | 169                                    | 20   |
| Maternity and Child<br>Health Nurses .. | 119                            | 247                                    | 70   |
| Aid Post Orderlies ..                   | 40                             | 112                                    | 75   |

#### *Nursing Services*

A projected programme for the localisation of all aspects of the nursing service has been prepared and is being implemented. The programme provides for an annual reduction in the number of overseas nursing staff, while at the same time allowing for the increasing demand for trained nurses, as the health services expand. With the natural diminution of numbers of female graduate nurses, due to marriage and family commitments, the supply of trained nurses still falls short of the demand.

A shortage of trained nurses in Papua New Guinea during the past year was owing to the fact that 73 nurses took part in post-basic and post-graduate studies or worked in Australian hospitals to gain ad hoc experience in various aspects of nursing. This trend will continue, and may accelerate, in view of the need to prepare Papua New Guinean graduate nurses to fill senior positions.

*Nursing Conference.* The second annual nursing conference, conducted in August 1971, had as its theme the preparation of Papua New Guinean graduate nurses to meet the accelerated localisation programme of the Health Department. Sixty per cent of the participants were local nurses, including 2 mission representatives. The conference has been followed by more meaningful in-service training for nurses in hospitals throughout the country.

ATTENDANCE AT ADVANCED NURSING COURSES  
IN 1971-72

| Course  | Months | Participants | Place            |
|---|--------|--------------|------------------|
| <i>Post-Graduate Study</i>                    |        |              |                  |
| Diploma, Nursing Education ..                 | 10     | 1            | Malaya           |
| Diploma, Nursing Administration ..            | 10     | 2            | Australia        |
| Diploma, Community Health ..                  | 10     | 10           | Papua/New Guinea |
| Certificate, Ward Management ..               | 6      | 2            | Australia        |
| Post-Basic Study—<br>Midwifery Certificate .. | 12     | 24           | Papua/New Guinea |
| Midwifery Certificate ..                      | 12     | 6            | Australia        |
| Psychiatric Certificate ..                    | 12     | 6            | Papua/New Guinea |
| Hospital In-service Courses—                  |        |              |                  |
| Outpatient Nurse ..                           | 12     | 6            | Port Moresby     |
| Operating Theatre ..                          | 12     | 4            | Port Moresby     |
| Anaesthetics Nurse ..                         | 12     | 2            | Port Moresby     |
| Ad hoc experience ..                          | 6-9    | 10           | Australia        |
| <b>Total ..</b>                               |        | <b>73</b>    |                  |

Following the conference, hospital matrons have taken more positive steps to localise senior positions. The nurses currently completing the Diploma of Community Health, will occupy supervisory positions. The positions of Principal in the Schools of Nursing at Rabaul and Goroka have been localised, and 8 local nurses have now been transferred to Schools of Nursing as teachers.

*Nursing Manpower and Localisation.* Currently, 1,264 trained nurses are actively engaged in nursing in Papua New Guinea. This represents one trained nurse to every 2,000 people. The chart on nursing manpower shows the breakdown into local and expatriate staff. Of those nurses employed by the Department of Public Health, 72 per cent are local graduates in either general nursing or maternal and child health, or both.

NURSING MANPOWER

|  | Expatriate | Local      | Total        | % Local   |
|--|------------|------------|--------------|-----------|
| <b>Hospitals—</b>                            |            |            |              |           |
| Senior Positions ..                          | 50         | 38         | 88           | 43        |
| Trained General Nurses ..                    | 128        | 267        | 421          | 69        |
| Trained Maternity and Child Health Nurses .. |            | 26         |              |           |
| <b>Community Health—</b>                     |            |            |              |           |
| Senior Positions ..                          | 21         | 18         | 39           | 49        |
| Trained General Nurses ..                    | 22         | 80         | 200          | 89        |
| Trained Maternity and Child Health Nurses .. |            | 98         |              |           |
| <b>Schools of Nursing—</b>                   |            |            |              |           |
| Senior Positions ..                          | 4          | 3          | 7            | 43        |
| Tutors, Clinical Teachers                    | 30         | 8          | 38           | 21        |
| <b>Total ..</b>                              | <b>255</b> | <b>538</b> | <b>793</b>   | <b>72</b> |
| <b>Church Nursing Services—</b>              |            |            |              |           |
| Trained General Nurses ..                    | 272        | 37         | 462          | 41        |
| Trained Maternity and Child Health Nurses .. |            | 153        |              |           |
| Blood Transfusion Service                    |            | 7          | 7            |           |
| Industry and Navy ..                         |            | 3          | 3            |           |
| <b>Total ..</b>                              | <b>272</b> | <b>200</b> | <b>472</b>   |           |
| <b>Grand Total ..</b>                        | <b>572</b> | <b>737</b> | <b>1,265</b> | <b>58</b> |

The percentage of localisation in the mission nursing services is 41 per cent, the greatest number of local graduates being maternal and child health nurses.

*WHO Fellowships.* Three fellowships for post-graduate study enabled 2 women to undertake the Diploma of Nursing Administration in Australia and one man to undertake the Diploma of Nursing Education in Malaya. A senior nursing officer from the regional headquarters in Manila, paid a 1-week visit to discuss further WHO assistance in post-graduate nursing courses.

NURSE GRADUATES BY CATEGORIES IN 1971-72

| Category                  | Number | Schools of Nursing      |
|---------------------------|--------|-------------------------|
| General Nursing 'B' Group | 7      | Government              |
| General Nursing 'T' Group | 119    | Government and Missions |
| Maternal and Child Health | 70     | Missions                |
| Nurse Aides ..            | 137    | Government and Missions |

The intake of student nurses in January 1972 was an all-time record. This augurs well for the future, as the number of students leaving school at higher levels of education is increasing.

Nurse-aides are carrying a heavier load of work and responsibility than was originally envisaged. In the Western Highlands and the Sepik River areas in particular, the trained nurse-aides provide most of the nursing service in many rural health centres. They train at a base hospital and return to their home area to work.

The Nursing Council, through its education committee, continued to prepare basic nursing syllabi and to set minimum standards for all courses. The Enrolled Community Health Nurse syllabus is completed and has replaced the previous Maternal and Child Health course. Four of the 8 nursing positions on the Nursing Council are now filled by local graduate nurses.

*Community Health Nursing.* Work in this area is expanding steadily. A trained nurse will be posted to Dreikikir for the first time while 2 local graduates will replace expatriate mission nurses at Lumi in the Sepik area. Other existing services are being strengthened. Standards and efficiency are being raised through district level conferences which include Mission nurses.

Nurses are actively involved in the Nutrition Rehabilitation Units for mothers and babies which have been established, under the

guidance of paediatricians, in Port Moresby, Goroka, Lae and Madang. Follow-up home visiting is being carried out to consolidate the teaching provided at the units. A home nursing service has been introduced in Port Moresby to care for post-natal patients. This allows mothers to return to their families earlier.

Progress in all aspects of nursing is providing improved services through better utilisation of staff and higher standards of nursing care.

#### *Mental Health Division*

The division continues to develop a wide range of activities directed towards promoting the mental health of all peoples living in Papua New Guinea. They include community mental health, training, hospital services, medico-legal psychiatry, occupational therapy and transcultural psychiatric research.

*Community Health Measures.* Community mental health measures receive close attention. Reasonable words of caution must be uttered concerning the continuing care of mentally-disordered persons in the community. It is possible to become unduly optimistic and to believe that by reducing the number of psychiatric cases resident in hospital, all has been done that needs to be done. It is not always progress, however, to remove patients from an excellent therapeutic environment and place them without financial means and without social support in a non-receptive hostile community. Nevertheless, the psychiatric social workers completed over 1,000 home visits during the year. Patients were escorted to and from the centrally-placed psychiatric services, and visited at other times in their own homes by these workers, who establish a therapeutic alliance with kinsmen, missions, army, private enterprise, and other authorities. Psychotropic drug medications are arranged on the spot when this is practicable.

*Staff Training.* The training programme continues at all levels. It is the policy of the department to graduate 10 psychiatric nurses each year for the next 5 years. Seven graduated during the 1971-72 period. They have taken up new positions at the Laloki Psychiatric Centre and at general hospitals. Ten orderlies were given a formal course of in-service training during the year. Medical students are introduced to psychiatry briefly in the second year, and then attend a formal series of lecture-demonstrations during the fourth and fifth years of their course. Three

psychiatric nurses are at present abroad receiving overseas training in occupational therapy and rehabilitation at psychiatric facilities in Australia. Clinical psychologists, seconded from the Public Service Board, contribute actively to the training programme and periodic clinical meetings take place on a weekly basis at the psychiatric ward of the general hospital and, on a monthly basis, at the Psychiatric Centre, Boroko. All interested health workers are encouraged to attend. The divisional anthropologist was on study leave for part of the year preparing her Master's Thesis on family problems.

*Hospital Facilities.* Patients are hospitalized at the Laloki Psychiatric Centre and the 4 main general hospitals of Lae, Goroka, Rabaul and Port Moresby. Eighty-one patients were admitted to Laloki during the year. All categories are treated, including voluntary as well as certified patients.

The criminally insane also receive treatment at Laloki. Treatments include modern psychotropic drug medications, psychotherapy, electro-convulsive therapy, recreational therapy, and rehabilitation. The Laloki Rehabilitation Annexe is designed along village lines and includes a workshop, farm, and half-way house. The half-way house, which is run by the patients themselves, is used by day patients, controlled chronic patients, and recovering acute patients. Periodic meetings of the entire psychiatric technical staff, psychiatrist, psychologist, medical officers, psychiatric social workers and anthropologist, assess those living in the half-way house, and other patients in the Rehabilitation Annexe.

The general hospitals at Lae, Goroka, and Port Moresby have their own psychiatric wards. At Nonga in Rabaul, the patients are integrated with those of the general medical ward. These units are serviced by specialist physicians, psychologists, psychiatric nurses, and welfare workers. Periodic visits are also made by the psychiatrist and other mental health technical officers. All forms of psychiatric treatments including occupational therapy are provided for the patients.

*Medico-legal Services.* The mental health services continue to receive requests for assistance from the courts, all categories of legal practitioners, and officers of corrective institutions. This medico-legal activity is a welcome improvement that has slowly developed over



the past 10 years. The Report of the Commission of Inquiry into Alcoholic Drink became available during the year. Important among its many recommendations was the rejection of reintroduction of prohibition, the report recognizing the mental health implications and the need for culturally-based research and education.

*Cargo Cults.* A word of warning needs to be raised in respect of cargo cult activities. The popular view and the social science view that these activities are logical and to be expected within the frame-work of developing cultures in Papua New Guinea is probably correct. An unfortunate by-product of this is that individual cultists are thereby considered never to be mentally sick. This is not in accord with the facts, and clinical examination reveals that some are. Mentally sick people are just as liable to be found among cultists as elsewhere and are in need of treatment in the same way as others. Despite the viewpoint that denies the possibility of overt mental disorder among cultists, observation shows that the nature of these movements in fact often allows abnormal personalities to function in various roles within the movement without attracting attention to the fact that they are mentally sick. Recognition of this fact, and of the widespread existence of cargo thinking, assists the mental health services in determining a normal pattern of behaviour against which to judge the healthy adaptation of the individual.

#### *Community Health Division*

The Community Health Division has undertaken a number of activities to promote the establishment of a comprehensive health service designed to produce improvement in the physical and mental health of the people of Papua New Guinea and the prevention, diagnosis and treatment of illness. It is intended that this health service should be available to every person in the country. As a contribution to this aim, the Community Health Division has assumed responsibility for health centres, maternal and child health centres, and aid posts.

*Health Centres.* The health centre is an establishment providing service for a population of not less than 5,000 people, and more commonly for approximately 20,000 people. It provides outpatient care, and may be responsible also for any one or more of the following: community health nursing, aid post supervision and environmental improvement. Community health nursing comprises: (i)

health supervision of children under 5 years of age; (ii) health supervision of pregnant and puerperal women; (iii) health supervision of chronically ill and handicapped persons by home visits; and (iv) school health activities.

A health centre will usually have a health extension officer in charge, though some have a doctor and some as yet have an auxiliary of lesser training in charge. They are usually staffed by one or more community health nurses. There may be additional nurses, orderlies, clerical staff and drivers, depending on the work of the particular centre. Health centres frequently have wards and beds for inpatients also.

Maternal and child health centres are intended mainly to provide services for mothers and small children, and the staff includes a nurse specially qualified in this field, most of whose duties involve maternal and child health work. The services embrace educative, curative and preventive medicine, and efforts are made to include all members of the family group in the care provided.

School health is an essential part of the work of community health nurses. Separate school health teams operate in Port Moresby, Rabaul, Lae, Goroka and Mount Hagen, but mobile staff from health centres visit schools in all areas. The home visiting service is gradually being increased as trained staff become available.

*Aid Posts.* A unique feature of medical services in Papua New Guinea is the extensive coverage for populations in rural areas provided by the aid post system. Although Papua New Guinea is a developing country, has a very large area of land and sea, and is handicapped by poor communications and difficult terrain, most villagers can reach an aid post to obtain treatment of illness or injury.

The aid posts, of which there are almost 1,400, are usually established in villages and primarily provide outpatient care. They are staffed by trained aid post orderlies. The effectiveness of medical care throughout the country will always be directly related to the contribution made by aid posts to patient care and community protection, and aid posts will, for many years to come, remain the point of first contact for the majority of people seeking medical care in Papua New Guinea. The aid post system has been given a high priority in planning in the Department of Public Health.

Aid post orderlies not only assist field programmes but also act as sources of accurate detailed information about their own areas, including information about traditional attitudes to health and disease. They demonstrate by example a way of life which avoids diseases and promotes health. They may provide early warning of outbreaks of disease, help with epidemic control measures and supply demographic information. Lastly, aid post orderlies are an invaluable point of contact between the people, the government, and the Department of Public Health; they encourage community participation in health services and programmes, and assist in the social and economic development of communities, particularly in the remote areas of Papua New Guinea.

The importance of peripheral health services—health centres, maternal and child health centres, and aid posts—and the volume of work performed by them require the appointment of a senior medical officer to exercise administrative responsibilities for their activities. The Community Health Division looks forward to the appointment of such a person in due course.

*Urban Local Government Councils.* The introduction of urban local government councils introduces an additional factor into the current policies of relationships between the Public Health Department and the health work conducted by councils. Major outpatient and inpatient services, together with preventive services, will continue to be provided by the Public Health Department in urban areas, but local-level curative services and assistance for preventive services is expected to be provided by urban councils.

*Community Health Programmes.* During the year under review, vigorous efforts have been made to clarify and define policy in regard to a number of community health programmes. In the course of the District Health Officers' Conference in 1971, policy documents were written in relation to immunisation programmes, endemic goitre and cretinism, tuberculosis and leprosy control, and the aid post system. Subsequent conferences have prepared detailed policy statements as a guide to the activity of field health staff in relation to school health services, health laboratory services, dental services, health inspection, malaria and venereal diseases control, and shortly a quarantine conference will also be held.

Certain new health problems are becoming important. Control over the use of toxic pesticides, and the field of occupational health generally, have been matters of concern to the Community Health Division. Legislation relating to food standards and food hygiene has been under consideration. Several major epidemics, including influenza and whooping cough, in several parts of Papua New Guinea have required the expenditure of time, effort and resources for their control. The rapid increase in venereal disease incidence has called for increased effort in the field, which is discussed in the section dealing with venereal diseases control. Increased travel and tourism with consequent movement of large numbers of people from overseas through Papua New Guinea will represent an increasing responsibility for the Health Department to maintain effective quarantine procedures, to protect the people of this country from the entry of smallpox and cholera in particular. The risk of the entry of cholera to Papua New Guinea was emphasised during the year by the occurrence of a number of cases of cholera in adjacent areas of West Irian.

*Missions.* Christian missions provide medical and health services through hospitals, health centres, aid posts and field services. The Public Health Department provides drugs and dressings to approved mission health establishments as well as financial assistance through subsidies, and quarterly grant-in-aid payments which are based upon the volume of work being carried out by the health establishment. The Community Health Division has a role in the rationalisation of the services offered by missions. It gives advice and guidance in relation to services to be provided and areas to be covered, with appropriate readjustments of areas of action between Government and mission health workers to provide effective distribution of health services without duplication or omission. The payment of mission subsidies is undertaken by the Executive Officer (Health Services) in the Administrative Services Division of the Department, while the Community Health Division makes recommendations upon the need, quality, and distribution of mission services in relation to subsidy payments.

The absence, until late in the year, of an Assistant Director, Maternal and Child Health, has thrown a heavy burden upon the Senior Health Matron.

The Division's work has advanced as a result of the appointment of a medical officer in the field of family planning and additional expert personnel in nutrition will allow greatly increased effectiveness of these essential developing services.

The Health Department has been pleased to offer co-operation to the Faculty of Medicine of the University of Papua New Guinea which makes use of Health Department services for training and research purposes in Port Moresby and in Kainantu sub-district of the Eastern Highlands District.

In reviewing and planning community health programmes, the writer has been impressed once again by the paradox of public health; by raising the life expectancy of the population and especially of children, problems of rapid population growth are revealed. There are no problems capable of being solved once and for all; there are no final solutions.

The people of this young nation, including its health workers, are showing in various ways their intention to establish their independence and resist patronage. There is no patronage so bad as that of the expert, and answers laid down by authority represent this kind of patronage.

Only limited progress has been made towards effective involvement of the community in its own health care. It is possible that in our authoritarianism, we try too hard to take away the sicknesses of men, women and children—sicknesses which exist in our definition, not theirs.

Our medical services also continue the mystique of the expert and of institutionalised expertise, perpetuating a model of health based on people bringing their sickness to a skilled specialist. This model can never be provided for the whole population. Perhaps health professionals should re-emphasise the powers of mutual healing which reside in ordinary human groups that care for one another, and share their diversity of skill and experience.

#### *Maternal and Child Health*

During the year marked progress has been made in developing the work of the division to include all members of the family, thus providing a comprehensive service to the community. With this development the term

maternal and child health is being dropped in favour of community health. The emphasis will continue to be on mothers and children, as these make up about 65 per cent of the population, but services to other members of the family group will be encouraged. As formerly, these will continue to include education, medical care and preventive medicine.

Difficulty has been encountered in some urban areas in persuading mothers to attend clinics, probably because clinics are regarded as being for sick children, and it is thought that well children do not require to be examined. Various ways of educating and encouraging mothers to attend are being tried, including early morning clinics and more participation and consultation with the people themselves as to their wishes.

New clinics were opened at Butibum in the Lae town area, Margarima in the Southern Highlands, Kaintiba in the Gulf District, and at Arawa. Some clinics formerly undertaken by the missions have been included in the department's programme, e.g. Simbai, Aiome and Bundi in the Madang District.

The Catholic Mission in the Southern Highlands opened stations at Pureni and Williams and, in Vanimo, enlarged the area they served. Air patrols have been extended to include Chimbuloki and Garaina in the Morobe District. Owing to lack of funds, missions operating in the West Sepik had to curtail about 20 centres conducted by means of air patrols.

Emphasis has been given to the importance of in-service training and in many centres regular meetings are now being held, at which guest speakers are invited and the nursing staff participates in discussion groups. The full impact of the cessation of maternal and child health training in 1968 is now being felt, and the temporary absence of 5 senior local nurses to attend the Diploma Course in Community Health has made this a difficult year. Good liaison continues between the many Christian missions undertaking this type of field service and many of their staff have attended seminars conducted in the main centres.

Community health nursing staff are now seeking the assistance of aid post orderlies wherever they can, to help locate children not attending clinics, and to assist in follow-up treatments.

The Maternal and Child Health Division works from 65 centres. This includes 6 sub-centres in Port Moresby and 1 sub-centre at Lae. Forty-seven of the centres are staffed entirely by local sisters and the expatriate sisters continue to act as consultants. There are 197 local sisters and 43 expatriate sisters working at these centres. During the year there were 193,312 attendances of children under 1 year of age, 406,678 attendances of children from 1-5 years of age and 55,288 attendances of children 5 years of age and over. Antenatal attendances numbered 48,497 and community health nursing staff delivered 2,714 mothers. The 5 centres which have special school health teams continue to have a full health programme and other centres are responsible for visiting schools in the area regularly. During the year 87,860 school children were enrolled, 52,904 school children examined and 16,936 treatments were given. A greater effort has been made to see that children enrolled at clinics receive at least 2 injections of triple antigen and that these children and school children receive BCG.

A total of 19,518 homes were visited for the first time, and there were 11,612 revisits, during which 26,939 adults and 33,190 children were seen. This is exclusive of the home visiting done from Taurama hospital when 1,060 homes were visited and 3,437 adults and 3,207 children were seen.

The Papua New Guinea Government subsidises 227 mission centres, and 176 local sisters and 218 expatriate sisters are working in the missions. During the year 241 students were in training at the 10 mission training schools, 62 passed the child health examinations and 63 the midwifery examinations, 70 graduating with both certificates.

Early in 1972 the Lutheran Mission, Mambisanda, commenced community health training with 6 students and the Baptist Mission, Baiyer River, and the United Church at Irua and Kapuna began to introduce the new community health nursing programme.

There were 285,540 attendances of children under one year, 794,813 attendances in the 1 to 5 year age group and 150,115 attendances of children 5 years and over at mission centres. There were 62,746 school children enrolled, of whom 35,422 were examined and 35,991 treatments were given. The enrolment figures for children under 5 years of age are shown in Table 1.

TABLE 1  
ENROLMENTS AT CLINICS OF CHILDREN  
UNDER 5 YEARS OF AGE

|                                | Under 1 year | 1 to 5 years | Total   |
|--------------------------------|--------------|--------------|---------|
| Public Health Department .. .. | 18,896       | 60,415       | 79,311  |
| Mission .. ..                  | 32,907       | 113,373      | 146,280 |
| Total .. ..                    | 51,803       | 173,788      | 225,591 |

Using the 1966 census figures which show 17.2 per cent of children under the age of 5 years, Public Health Department and mission maternity and child health workers saw approximately 74 per cent of the children at least once in the areas visited by them, and 52 per cent of the total number of children under 5 years of age in the country.

During the year some 44,000 women were seen at antenatal clinics in the areas visited by Public Health Department and Mission maternal and child health workers.

TABLE 2  
NUMBERS OF ANTENATAL PATIENTS AND  
THEIR TOTAL ATTENDANCES

|                                | Antenatals | Attendances |
|--------------------------------|------------|-------------|
| Public Health Department .. .. | 15,303     | 48,497      |
| Mission .. ..                  | 28,681     | 112,569     |
| Total .. ..                    | 43,984     | 161,066     |

Working on the basis of an estimated birth rate of 44/1000 population (van de Kaa), in a population of 2,520,000 (1972) the estimated available total antenatals would be 110,880—hence the maternal and child health services are seeing 40.6 per cent of all pregnant women. During the coming year emphasis is to be placed on improving the care available to pregnant women not only during the antenatal period but during delivery.

#### Family Planning

Papua New Guinea lacks a national population policy or a national population council or equivalent co-ordinating body. Nevertheless the allocation of funds for family planning has been authorised, and with the money now allocated, a service has been established and integrated with both the maternal and child

health and the general health services. The limited programme in operation is unlikely to have any demographic effect.

In the 1971-72 reporting year, 2,389 contraceptives were supplied to clients, and of these 1,796 were intrauterine contraceptive devices. The remainder were mainly oral contraceptives. Contraceptive advice is provided by medical officers and also by experienced nurses who receive in-service training to enable them to conduct family planning activities.

Family planning is a component of all training courses for nurses, health extension officers and doctors in Papua New Guinea. The expenditure on family planning, excluding salaries, during 1971-72 was \$7,000. The attitude of the population of Papua New Guinea is generally favourable towards family planning. A number of traditional measures have been used to prevent conception and cause abortion. Although these were probably ineffective and included a large magical component, nevertheless the people are thereby familiar with the idea of limiting reproduction. More than half the population are associated with one or other Christian mission or church, all of which are in favour of family planning, although some, notably the Roman Catholic Church, restrict their approval to certain methods and disapprove of others. In general, conservatism and lack of understanding influence the demand and acceptance of contraception by the people.

Were there a considerable increase in the demand for contraception—and this is considered likely in the near future—the staff of the Public Health Department and missions would be unable to fulfil it. It is intended to increase the number of health personnel with competence in the techniques of contraception by in-service training. Expansion of the programme will depend upon community and political endorsement, the integration of population education into both school and adult education programmes, and increased staff specifically for family planning activities, together with the mobilisation of all general health staff to provide services when requested. A successful nation-wide family-planning programme would require increasing collaboration between departments and agencies. No direct international aid is being provided for the family planning programme at present.

During in-service training courses in family planning 32 trained nurses have received

instruction in the theory and techniques of family planning practice. Of these, 16 were employees of the Public Health Department and 16 were mission health workers. At the end of the reporting year 11 of these nurses were active in family planning as one component of their overall duties in health care. Sixteen trained nurses have received instruction in the theory of family planning only. The staff engaged solely in family planning consist of 1 part-time medical officer in Port Moresby and 3 trained nurses, also in Port Moresby.

At present, no effective Family Planning Association or other voluntary organisation promoting family planning is in operation. No advertising of services is conducted apart from face-to-face discussions between health workers and clients. An information booklet produced in Papua New Guinea has been printed.

Population statistics based on the results of two censuses, together with detailed demographic data on several areas obtained through special surveys, indicate that Papua New Guinea faces an important problem due to population increase in relation to limited resources.

#### *Environmental Health*

Environmental health services are concerned with water supplies, disposal of wastes, building control, communicable disease control, food hygiene, vector control, health legislation, quarantine and other related problems.

*Health Inspection Services.* Thirty-six health inspectors are employed by the Health Department, of whom 24 are Papua New Guinean and 12 expatriate; it is expected that all health inspector positions will be occupied by Papua New Guineans by 1975.

Eight men graduated from the Paramedical College in Madang in 1971, with Royal Society of Health certificates. A further 6 graduates are expected in 1972. Under the Commonwealth Practical Training Scheme, 1 health inspector worked with the Melbourne City Council, observing the functions of the Health Inspection Services for State Health Departments and Municipal Councils in Victoria. Experience such as this, with problems of industrialisation, will assist in planning for situations developing in Bougainville, Port Moresby and other main centres in Papua New Guinea. The in-service training of graduate health inspectors has proved well worth

while, and has given them valuable experience, particularly in an urban environment.

The position and duties of health inspectors in relation to the special problems of Papua New Guinea and to other categories of health personnel have been considered in detail. A health inspector is an officer employed by a health authority to promote health and prevent disease. He keeps himself informed of the sanitary conditions of the area in which he is working. He can take action in relation to water supply, waste disposal, building control, food hygiene, vector control, communicable disease control and quarantine. Many of his duties are required under the law, and a knowledge of health legislation is an essential part of his job. Nevertheless, most of his efforts towards environmental improvement will be through health education rather than legal compulsion. A detailed statement on the role of the health inspector was written and accepted as Health Department policy during the year.

A Conference on Environmental Health Services was held in Madang in May. One of the most important recommendations was to limit the graduates from the Paramedical College to 9 per year but this has not yet been officially approved. The recommendation is based on the view that the health inspector's special skills should be oriented mainly to urban situations. In rural areas, health extension officers are the people directly concerned with environmental health improvements. Health inspection services are to be provided increasingly by local government councils, who will in the future employ most health inspectors, and may receive subsidy assistance from the central government. Arrangements for transfer of staff and facilities to the urban councils are well advanced in Port Moresby and Madang.

*Communicable Diseases.* An epidemic of an infection considered to be dengue fever swept through Rabaul in October 1971 causing 1,168 cases in the town population. Adults of all races were equally affected, but no children suffered from the disease. The infection spread to Lae, apparently carried by 2 air hostesses from Rabaul. No fatalities were reported. Entomological survey has revealed the prevalence of *Aedes aegypti* vectors. Cases of dengue continue to be reported from East New Britain but in decreasing numbers up to the present time. Mosquito control and environmental sanitation in urbanised areas

are being strengthened through the activities of health inspectors.

Minor epidemics of influenza, pertussis and diarrhoeal diseases occurred in many parts of the country but control measures kept mortality low.

Cholera in West Irian is a constant threat in Papua New Guinea. Quarantine measures, immunization and upgrading of environmental sanitation, particularly water supplies, have been reinforced as a precautionary measure against entry of the disease into Papua New Guinea.

#### *Malaria Control*

Papua New Guinea is considered to be the most malarious country in the South West Pacific area and parts are comparable with some of the most malarious areas in the world. Control of malaria is regarded as the number one priority of the Health Department. A malaria control programme was commenced in 1957 and has been expanded to give protection to approximately 50 per cent of the country's population. Conventional methods using residual spraying of houses with DDT in all areas and larval control in urban areas are the main mechanisms of attack. Drug prophylaxis is recommended to certain sectors of the community and anti-malarial drugs are freely available for treatment of acute attacks of the disease. During 1971-72 expansion of the programme has been limited to the residual spraying of the Port Moresby and Lae urban areas which are within operational districts.

The main emphasis of the programme has been the formation of a stable establishment, recruitment and training of new staff, the revision of training methods, localisation and the establishment of feasible residual spraying programmes in each operational district.

*Staff.* A Papua New Guinean medical graduate has been working with the malaria branch for more than a year, during which time he has been responsible for the Milne Bay, Northern and Central Districts. At the beginning of 1972 he relieved the Assistant Director while he was on leave and then proceeded to Australia to undertake studies for his Diploma in Tropical Medicine and Hygiene.

Two entomologists were employed towards the end of 1971 and a third has been recruited. Base malaria entomology programmes have been set up in each operational

district and investigations of specific entomological problems relating to insecticide susceptibility, changes in man-vector relationship, and the distribution of both anophelines and *Aedes* species (in relation to arbovirus transmission) have been undertaken.

The lack of an epidemiologist has to a certain degree hampered progress and active means are being taken to recruit one. Staff numbers in all but 3 districts have been brought up to an adequate level, but there is still need for further training and retraining of staff particularly at the team leader and area supervisor level.

The present career structure for laboratory technical workers is inadequate, and a scheme is being developed, in conjunction with a national health laboratory service, for better training and opportunities of advancement for these staff.

*Spraying Programmes.* With adequate finance for the present programme, the major limiting factors to greater progress have been a shortage of skilled manpower and the lack of road and water transport in certain districts. Condensed spraying programmes have been designed for all districts and have been operational for at least one complete spray round in all but highland districts, where manpower resources and transport are the limiting factors. The introduction of the condensed spray rounds has resulted in savings on manpower, transport and cost, and has virtually guaranteed complete spray rounds at no greater than 6-monthly intervals, and regular time tables which have a fair degree of flexibility. Between rounds, time is available for training and retraining of staff, follow-up spraying of missed and new structures, health education in hard core areas of resistance to spraying and updating or completion of geographical reconnaissance.

*Training Courses.* Training courses for junior grade workers have been conducted in the field and of 25 trainees who sat for examination, 21 qualified as squad leaders. The first course for female microscopists was held at Kundiawa and 5 qualified. All graduates have shown exceptional ability in their work. The high-level area supervisors' course attracted more health extension officers who found the training extremely interesting. This course has been considerably upgraded in standard both in course content and in teaching. Demand on instructors at the National Malaria School at Kundiawa has been

relieved by the employment of a competent instructor from the Public Health Institute in Malaysia. The area supervisors' course produced 7 graduates this year. The National Malaria School is responsible for the continuous training of staff in the field in addition to formal courses at Kundiawa. This is facilitated by correspondence courses and visits to the field by instructors.

A revision in management and supervision, followed by a workshop for district supervisors, was successfully conducted in June. One district health officer and 2 laboratory supervisors attended WHO-sponsored courses at the Malaria Eradication Training Centre, Manila.

*Programme Assessment.* Operational assessment of the programme at the headquarters and field levels has improved considerably and both field and headquarters staff are now in a position to take action on operational problems and deficiencies. Epidemiological results from the field surveys and passive case-detection units are improving and are verified centrally. The accuracy of results and their recording is almost universally good but final evaluation and action lags, due to the shortage of skilled manpower at headquarters level.

Parasite rates have remained relatively stable or have fallen in all districts except Northern District and West New Britain where there have been dramatic rises in rates in some project areas. In other districts focal areas of a relatively high degree of infection are becoming apparent and steps will be taken to deal with these.

The cause of a rise in parasite rates in Northern District has been predominantly administrative, and steps have been taken to improve the situation. Following the cyclone in the Tufi area drug administration was begun, and continued during the rebuilding phase, until residual spraying could be recommenced.

In West New Britain due to administrative breakdowns caused mainly by shortage of staff and transport until late in 1971, spray rounds have been completely missed or only partially completed. In addition the development of the oil palm industry has attracted both planned and itinerant labour and squatters from unsprayed areas and has thus boosted the malaria parasite reservoir. New anopheline breeding sites created during construction of roads and farms made conditions

favourable for rapid transmission of malaria. The situation is now being brought under control, spray rounds have been re-organised and a system of passive case-detection and treatment of incoming groups has been set up. No further expansion of the oil palm project should be undertaken without provision of adequate protective measures.

In the Milne Bay District focal outbreaks of malaria in the Trobriand Islands and Engi-ner group during December 1971 were treated with focal spraying and drug administration.

The large number of locked structures in East New Britain is contributing towards rising parasite rates in those areas and the large number of malaria cases being treated in Rabaul clinics is indicative of the epidemic which is present in that area. A similar situation is seen in the East Sepik District where the overall parasite rate has been considerably lowered with improved operations. With greater co-operation allowing more complete coverage, greater achievements are attainable.

Passive case-detection is being stepped up throughout the country. Blood slides are taken from all patients with fever attending health units for treatment and examined for malaria. During the past year considerable coverage has been achieved in the Chimbu District, slightly less coverage in the Eastern Highlands District and only limited coverage

TABLE 1  
STAFF ESTABLISHMENT 1971-72

| Category                 | Number           |
|--------------------------|------------------|
| Indigenous .. .. .       | 350              |
| Overseas .. .. .         | 37               |
| Labourers .. .. .        | (581)            |
| Vacant positions .. .. . | 236              |
| <b>Total .. .. .</b>     | <b>623 + 581</b> |

TABLE 2  
STAFF NUMBERS BY CATEGORIES 1971-72

| Category                          | Papua New Guinean | Expatriate |
|-----------------------------------|-------------------|------------|
| Regional Supervisors .. .. .      | ..                | 1          |
| District Supervisors .. .. .      | 6                 | 7          |
| Area Supervisors .. .. .          | 13                | 6          |
| Instructors .. .. .               | 2                 | 2          |
| Headquarters staff .. .. .        | 10                | 11         |
| Technical and Clerical (District) | 62                | 5          |
| Team Leaders, Squad Leaders       | 264               | ..         |
| <b>Total .. .. .</b>              | <b>357</b>        | <b>32</b>  |

TABLE 3  
NUMBERS ATTENDING STAFF TRAINING COURSES 1971-72

| Name of course                                       | Papua New Guinean | Expatriate |
|--|-------------------|------------|
| Area Supervisors .. .. .                             | 6                 | ..         |
| Squad Leaders (District level)                       | 21                | ..         |
| Microscopists (Assistant Technicians Female) .. .. . | 6                 | ..         |
| Overseas Courses (Laboratory Supervisors) .. .. .    | 2                 | ..         |

TABLE 4  
POPULATION PROTECTED AGAINST MALARIA AND STRUCTURES SPRAYED 1971-72

| District                   | Total population | Protected population | Percentage protected | Structures sprayed | Structures unsprayed  |
|----------------------------|------------------|----------------------|----------------------|--------------------|-----------------------|
| Western .. .. .            | 70,640           | Nil                  | Non-operational      | ..                 | ..                    |
| Gulf .. .. .               | 64,114           | Nil                  | Non-operational      | ..                 | ..                    |
| Central .. .. .            | 163,932          | 113,741              | 69.38                | 19,162             | 1,124 (5.90%)         |
| Milne Bay .. .. .          | 115,307          | 115,307              | 100.00               | 33,846             | 1,329 (3.90%)         |
| Northern .. .. .           | 66,305           | 66,305               | 100.00               | 27,963             | 1,045 (3.70%)         |
| Madang .. .. .             | 175,913          | 7,479                | 4.25                 | ..                 | ..                    |
| East Sepik .. .. .         | 183,095          | 141,349              | 77.19                | 85,152             | 15,274 (17.90%)       |
| West Sepik .. .. .         | 114,813          | Nil                  | Non-operational      | ..                 | ..                    |
| Morobe .. .. .             | 241,692          | 43,518               | 18.00                | 3,572              | 12 (0.34%)            |
| Western Highlands .. .. .  | 339,010          | 109,646              | 32.34                | 68,071             | 1,088 (1.59%)         |
| Eastern Highlands .. .. .  | 235,195          | 159,418              | 67.78                | 55,303             | 1,214 (2.20%)         |
| Chimbu—                    |                  |                      |                      |                    |                       |
| Lowlands .. .. .           | ..               | ..                   | ..                   | 2,801              | 86 (3.10%)            |
| Highlands .. .. .          | 192,864          | 167,209              | 86.69                | 108,352            | 3,176 (2.90%)         |
| Southern Highlands .. .. . | 212,644          | Nil                  | Non-operational      | ..                 | ..                    |
| East New Britain .. .. .   | 129,804          | 129,804              | 100.00               | 37,340             | 9,489 (25.40%)        |
| West New Britain .. .. .   | 50,969           | 50,969               | 100.00               | 19,326             | 670 (3.40%)           |
| New Ireland .. .. .        | 57,999           | 57,999               | 100.00               | 34,361             | 2,203 (6.40%)         |
| Manus .. .. .              | 23,843           | 23,843               | 100.00               | 13,108             | 104 (0.79%)           |
| Bougainville .. .. .       | 83,575           | 83,575               | 100.00               | 31,075             | 1,536 (4.94%)         |
| <b>Total .. .. .</b>       | <b>2,521,714</b> | <b>1,270,162</b>     | <b>50.36</b>         | <b>539,432</b>     | <b>38,350 (7.13%)</b> |



TABLE 5  
MALARIA PARASITE RATES AND POSITIVE SLIDES 1971-72

| District             | Parasite rate 1971-72 | Previous parasite rate | Slides examined | Total positive | Positive slides by species |       |       |       |
|----------------------|-----------------------|------------------------|-----------------|----------------|----------------------------|-------|-------|-------|
|                      |                       |                        |                 |                | p.f.                       | p.v.  | p.m.  | Mixed |
|                      | Per cent              | Per cent               |                 |                |                            |       |       |       |
| Western Gulf         |                       |                        |                 |                |                            |       |       |       |
| Central .. ..        | 3.08                  | Not available          | 9,008           | 277            | 129                        | 38    | 126   | 16    |
| Milne Bay .. ..      | 9.68                  | 1957 = 59.0            | 10,357          | 1,088          | 706                        | 269   | 157   | 44    |
| Northern .. ..       | 22.20                 | 1963 = 31.9            | 7,997           | 1,776          | 984                        | 483   | 427   | 118   |
| Madang .. ..         |                       | 1964 = 24.9            |                 |                |                            |       |       |       |
| East Sepik .. ..     | 13.6                  | 1958 = 74.7            | 16,546          | 2,245          | 866                        | 948   | 482   | 51    |
| West Sepik .. ..     |                       | 1963 = 53.4            |                 |                |                            |       |       |       |
| Morobe .. ..         | 8.05                  | Not available          | 1,129           | 94             | 75                         | 15    | 9     | 5     |
| Western Highlands .. | 0.27                  | 1965 = 0.5             | 12,475          | 34             | 8                          | 24    | 2     |       |
| Eastern Highlands .. | 0.20                  | 1963 = 2.1             | 9,963           | 20             | 13                         | 4     | 3     |       |
| Chimbu—              |                       |                        |                 |                |                            |       |       |       |
| Lowlands .. ..       | 7.08                  |                        | 910             | 71             | 46                         | 14    | 17    | 6     |
| Highlands .. ..      | 0.40                  | 1962 = 36.6            | 17,185          | 69             | 22                         | 38    | 21    | 12    |
| Southern Highlands   |                       |                        |                 |                |                            |       |       |       |
| East New Britain ..  | 6.05                  | 1961 = 18.1            | 13,465          | 885            | 292                        | 485   | 167   | 59    |
| West New Britain ..  | 17.08                 | 1961 = 44.9            | 4,752           | 845            | 562                        | 162   | 174   | 53    |
| New Ireland .. ..    | 6.87                  | 1961 = 10.7            | 8,146           | 560            | 335                        | 231   | 19    | 25    |
| Manus .. ..          | 6.01                  | 1961 = 16.7            | 3,942           | 237            | 71                         | 174   | 3     | 11    |
| Bougainville .. ..   | 3.00                  | 1960 = 21.8            | 6,300           | 189            | 76                         | 116   | 5     | 8     |
| Total .. ..          | 6.87                  |                        | 122,175         | 8,390          | 4,185                      | 3,001 | 1,612 | 408   |

in other areas. Follow-up and radical treatment of cases has only recently begun, and is to be extended in certain areas where transmission is low. An active case-detection unit has been introduced in the Kundiawa town area, and it is intended to establish a small number of similar units in certain areas of the Highlands. Active case-detection requires home visits by trained surveillance workers to seek people with fever, from whom blood slides are taken.

WHO Advisers in epidemiology entomology and operations have been requested, with support from the United Nations Development Programme.

Although there is yet much to be done in reducing malaria further before expansion of the programme can be undertaken, there has, during the past year, been a considerable improvement in all operational aspects of the programme in most areas, with a general improvement in the morale of malaria service personnel.

#### *Tuberculosis Control*

During the year significant changes in the management of the tuberculosis control programme were initiated as a result of the District Health Officers' Conference held in November 1971. Responsibility for control has now been vested largely in the District Health Services, and emphases have been directed towards the more effective exploita-

tion of bacteriology in diagnosis, and the management of patients on an ambulatory basis. Methods of reporting have been reviewed, and made more comprehensive.

The central laboratory in Lae will be strengthened, and a pilot project for bacteriological diagnosis has been started there using local peripheral feeder centres. Some training in smear mycobacteriology has been included in the training of malaria microscopists at Kundiawa.

Prophylactic measures directed towards the vulnerable groups under 15 years of age have been intensified, particular attention being paid to the newborn, and to school children. The school vaccination programme is improving, but not all districts approach the Port Moresby performance of almost 100 per cent cover of the school population. This programme is vital to control because of the significant prevalence of tuberculosis amongst school teachers. The potential for the occurrence of micro-epidemics in the school population is high in these circumstances. The success of all these programmes will depend on the provision of high-grade supervisory services in the districts. Supporting services for these must be adequate, in turn, if they are to function properly.

*Area Control Units.* The Area Control Units will continue to maintain Tuberculosis Registers from which will be compiled registers of

tuberculous patients for district use. Mass examination services will be their responsibility also, and they will provide overall supervision services for the districts in their areas. District tuberculosis control officers will undertake routine control work under the administrative control of the District Health Officer, technical advice being given, when necessary, by the Area Tuberculosis Control Officer.

*Vaccination Programmes and X-ray Examinations.* Performance in the past year has not come up to the expectations expressed in 1970-71. The vaccination programmes in the Highlands Area have been handicapped by the twin burdens of transport lack and participation by transport personnel in the national election campaign. X-ray examinations were carried out in the Madang and Bougainville districts, but the number is less than in 1970-71. Most of the units have been out of action. The major reason has been, as in the past, the incredible delays by suppliers in providing replacement parts.

*Case-finding.* Case-finding has proceeded largely on a basis of working from the known to the unknown patients. The notified patient load has increased during the year to circa 4,000 but it is apparent from supervisory visits that much of this increase is due to over-diagnosis and duplication of cases, and to failure to separate patients under formal therapy from those being given prophylactic therapy. Over-diagnosis has been particularly apparent in southern Papua New Guinea. The numbers of patients in the islands and mainland areas have remained much the same as in 1970-71, but a steady small number of new cases are being found in the highlands.

There has been little improvement in the quality of supervision of outpatient programmes but it is anticipated that the more intimate involvement of the district services in control will result in improvement in the future. The problems associated with control in this transitional period will not be long-lasting.

*Lae Central Laboratory.* The Central Laboratory at Lae continues to provide a reference service in mycobacteriology. The National Association for the Prevention of Tuberculosis in Australia will continue to support the Laboratory which will have to increase its activities as a result of policies proposed by

the District Health Officers' Conference. It will become an important component of the National Laboratory Service. It is clear, however, that the quality of the Laboratory's staffing will have to be improved. Its present head is an in-service-trained medical orderly.

No sensitivity studies were done at the laboratory during the year but some have been done in an Australian laboratory, and the results were as anticipated. No case of primary bacterial resistance has been found, but secondary resistance to primary therapy has been found in those few specimens from patients in whom it could be expected to occur. No case of resistance to other than primary therapy has been reported.

An investigation has been begun into the immunological status of vaccinated patients. The results of this investigation may prove to be important in deciding future policy in respect of BCG vaccination, particularly as it affects the highlands. In addition, a comparative assessment of the degree of transmission of tuberculosis in our communities has been started. The target groups for study are school children, for whom comprehensive records of tuberculin sensitivity covering the past 15 years are available.

*Staff.* Dr Philip Kame has been posted to the Tuberculosis Control Section as a trainee Tuberculosis Control Medical Officer.

#### TREND OF WORK OVER THE PAST FIVE YEARS

| Year          | BCG vaccinations | Micro-films |
|---------------|------------------|-------------|
| 1967-68 .. .. | 159,733          | 84,932      |
| 1968-69 .. .. | 293,246          | 72,055      |
| 1969-70 .. .. | 414,977          | 67,110      |
| 1970-71 .. .. | 305,727          | 71,994      |
| 1971-72 .. .. | 148,348          | 44,335      |

#### LAE TUBERCULOSIS LABORATORY

|   |       |
|---|-------|
| Lowenstein-Jensen medium slopes manufactured .. ..  | 6,100 |
| Smears examined for acid alcohol-fast bacilli .. .. | 4,916 |
| Cultures examined .. ..                             | 4,916 |

#### Leprosy Control

The Leprosy Control Service has been active in every district. The major part of all programmes has been carried out by the

Regional Leprosy Control Units at Port Moresby, Mount Hagen and Rabaul and the Leprosy Control Units at Madang, Wewak and Maprik. The work of this section has also been assisted by the various Missions engaged in leprosy control, both in the field and the special leprosy colonies.

*Regional and District Organisation.* A major change in leprosy control policy was outlined at the District Health Officers' Conference in November 1971. The District Health Officers are now expected to organize and conduct the leprosy control programmes, according to central policy, in their own districts. The regional Leprosy Control Units will play a continuing part in leprosy control under the direction of the Senior Specialist Medical Officer (Leprosy). These units will be concerned with surveys, the compilation and checking of registers, teaching, training, evaluation of programmes, the co-ordination of leprosy control between districts, and the investigation of any special problems.

Greater emphasis has been placed on the integration of leprosy treatment within the general health services with the maximum promotion of domiciliary care. Since this requires wider education of all sections of the health services in leprosy management and control, special teaching seminars have been conducted in the Highlands, Sepik and Madang Districts for health extension officers, maternal and child health nurses and aid post orderlies. In addition, special instruction in leprosy has been given to the nurses undergoing training at the Port Moresby School of Nursing.

*Surveys.* Leprosy patients are admitted to the various leprosy colonies and Government and mission hospitals. During the year 207,966 persons were examined for leprosy in mass surveys conducted by the special leprosy units. There is a growing resistance on the part of the community to co-operation in mass surveys. In view of this and the increasing demands on travel funds, increasing difficulties in the transportation of cargo and an effort to minimize inconvenience to the people, future leprosy surveys may have to be combined with other field programmes, as far as this is practicable.

During the year the number of leprosy patients in the various hospitals and colonies totalled 1,150. There were 1,193 admissions

and 1,310 discharges from these institutions and 9,035 patients were receiving domiciliary treatment.

*Field Trials with Acedapson.* Field trials of a long-acting injectable sulphone *Acedapson* still continue in the Karimui Census Division in the Chimbu District, and in the East Sepik District. The results to date are encouraging and show that this form of treatment is acceptable to the majority of people. In the East Sepik area the trial of *Dadds* is being conducted as an experiment in integration of leprosy treatment within the general health services. Experiences to date indicate that greater community health education, supervision and mobile services are needed to ensure maximum attendance for treatment. Laboratory tests are still being conducted to eliminate 'drug fastness' to *Acedapson* before this form of treatment can be considered suitable for adoption in other parts of the country.

*Leprosy Surgery.* Leprosy surgery is still carried out at 3 main centres, namely, Port Moresby, Madang and Togoba near Mount Hagen. The specialist surgeons also visited other centres such as Ubuia, Balimo, Tari, Mendi, Aitape, Yampu and Mambasanda. The surgeons at Port Moresby and Madang performed a total of 172 operations and the surgeons at Togoba 63 operations. The general trend of work indicated a distinct falling off in the number of patients now needing major corrective surgery. There are still difficulties in the promotion of footwear due to non-availability of the most suitable materials, but every effort is being made to remedy this situation by the use of conventional types of sandals.

In November 1971, Medical Officer of the Seventh Day Adventist Mission, Dr K. Robson, left the leprosy colony at Togoba to take up a temporary position at the General Hospital, Rabaul. He was replaced by Dr S. Smith who has received training in leprosy management and leprosy reconstructive surgery in India. The Health Department gratefully acknowledges the work of Dr Robson during the past 4 years and is happy that, with the help of Dr Smith, the leprosy surgery programme at Togoba can continue. The following is a summary of the leprosy control statistics showing the trend of work over the past 4 years:

TABLE 1  
NUMBER OF CASES REGISTERED AND NEW CASES TREATED ANNUALLY  
IN PAPUA NEW GUINEA

| Registration Centre         | 1968-69   |                  | 1969-70   |                  | 1970-71   |                  | 1971-72   |                  |
|-----------------------------|-----------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|
|                             | New cases | Total registered | New cases | Total registered | New cases | Total registered | New cases | Total registered |
| Highlands .. ..             | 627       | 7,910            | 469       | 8,383            | 403       | 8,230            | 420       | 8,542            |
| Port Moresby .. ..          | 255       | 1,415            | 249       | 1,656            | 206       | 2,521            | 190       | 2,711            |
| Madang .. ..                | 168       | 1,354            | 188       | 1,284            | 93        | 1,377            | 43        | 1,420            |
| Rabaul .. ..                | 128       | 1,553            | 115       | 1,480            | 44        | 1,268            | 16        | 1,284            |
| Leprosy Mission, Tari .. .. | 80        | 625              | 78        | 860              | 58        | 918              | 27        | 1,045            |
| Wewak, East Sepik .. ..     | ..        | ..               | 58        | 669              | 143       | 812              | 55        | 1,867            |
| Lumi, West Sepik .. ..      | ..        | ..               | 154       | 860              | 33        | 893              | 16        | 909              |
| Total .. ..                 | 1,258     | 12,857           | 1,311     | 15,192           | 980       | 16,019           | 767       | 17,778           |

TABLE 2  
SURVEYS AND DOMICILIARY TREATMENT CONDUCTED BY THE LEPROSY SERVICE

|                           | 1968-69 | 1969-70 | 1970-71 | 1971-72 |
|---------------------------|---------|---------|---------|---------|
| Population surveyed .. .. | 210,330 | 240,020 | 207,271 | 207,966 |
| New cases detected .. ..  | 397     | 575     | 593     | 653     |

TABLE 3  
LEPROSY RECONSTRUCTIVE SURGERY OPERATIONS

|  | 1968-69 |      |      |        | 1969-70 |      |      |        | 1970-71 |      |      |        | 1971-72 |      |      |        |
|--|---------|------|------|--------|---------|------|------|--------|---------|------|------|--------|---------|------|------|--------|
|  | Total   | Hand | Foot | Others | Total   | Hand | Foot | Others | Total   | Hand | Foot | Others | Total   | Hand | Foot | Others |
| Reconstructive Surgery Unit, Madang(a) .. ..       | 168     | 84   | 67   | 17     | 132     | 37   | 70   | 25     | 69      | 33   | 27   | 9      | 52      | 21   | 21   | 10     |
| Reconstructive Surgery Unit, Togoba(b) .. ..       | 62      | 30   | 27   | 15     | 124     | 53   | 30   | 41     | 167     | 72   | 42   | 53     | 63      | 31   | 15   | 17     |
| Reconstructive Surgery Unit, Port Moresby(c) .. .. | ..      | ..   | ..   | ..     | 140     | 62   | 52   | 26     | 143     | 80   | 45   | 20     | 120     | 82   | 24   | 14     |

(a) Established in 1964. (b) Established in 1969. (c) Established in 1970.

#### Venerology and Quarantine

The section responsible for venereal diseases and quarantine services was established within the Community Health Division of the Department in 1971, and it is hoped that it will eventually become an integral part of the health services. At present some of its functions are in the hands of the Environmental Health section, in particular the immunisation procedures related to quarantinable diseases, and the staff employed in the Venerology and Quarantine services are health workers seconded from the general medical and health services.

#### Venereal Diseases

*Incidence.* The incidence of venereal diseases in Papua New Guinea is progressively increasing as social habits change and people flock to the urban areas seeking employment. The community at large is now becoming aware of these diseases and the problems to which they give rise, and in an attempt to control their further spread, the Department has been reviewing its action plan and its approaches to these problems. The Committee appointed to deal with this task is shortly to present a policy document.

The available figures, based on reports from hospitals, health centres and mission health services, indicate that gonorrhoea is widespread throughout Papua New Guinea, but more markedly so in certain areas, as indicated in Table 1 below. The towns most affected are Port Moresby, Lae, Goroka, Kundiawa and Mount Hagen, and the incidence in Rabaul and Mendi is also high. In addition, Table 1 shows that, while syphilis is common in the highlands and in Lae, donovanosis is more common in Port Moresby. Other venereal diseases are rarely reported, and are of little significance.

The lowest age at which children in the highlands have been affected by venereal diseases is 12, and syphilis, in particular, was found. The incidence was higher in females than in males.

*Staff.* Venereal disease officers are currently employed in Port Moresby and Lae. An Area Venereal Disease Officer for the Highlands is operating from Goroka, and there is a District Venereal Diseases Officer at Goroka for the Eastern Highlands District and at Mount Hagen for the Western Highlands District. At present the position of Venereal Diseases Officer for Kundiawa is vacant and the work is being carried out by the District Health Officer and his hospital staff.

*Clinics.* Since July 1971 5 venereal disease clinics have been established at Port Moresby, Goroka, Lae, Kundiawa and Mount Hagen. The clinics are conducted by District venereal disease control teams under the leadership of a health extension officer and, other than the clinic at Port Moresby, are supervised by the Area Venereal Disease Officer based at Goroka. The activities of the control teams include diagnosis and treatment of cases of venereal disease, health education, contact tracing and follow-up of cases. They also co-operate with the general health services in a system of mutual referrals. Follow-up and contact tracing are difficult and are hampered by shortages of staff and transport. It is hoped to establish 2 more venereal disease clinics during the next reporting year at Rabaul and Arawa where the incidence of venereal disease is rising.

Laboratory diagnostic facilities at venereal disease clinics, with the exception of Port Moresby, are very limited, due in part to the lack of trained staff, so that the diagnosis of reported cases is largely on a clinical basis. It is hoped that when the National Laboratory

Service is established these facilities will be improved at area clinics.

District health education officers are currently responsible for education in matters relating to venereal disease. Programmes are not standardised, but it is felt that it would be more satisfactory if a single health education officer, to be based at Goroka, were allocated to the Venereal Disease Section.

Dr R. R. Wilcox, WHO Consultant on Venereal Diseases and Treponematosis, visited Papua New Guinea during the year, and recommended that a Papua New Guinean medical officer be sent to Liverpool, England, for advanced studies in this field.

The social and medical problems engendered by venereal diseases are continuing to increase as westernisation proceeds, and controlled western-type prostitution extends in the larger urban centres. The department is hopeful, however, that eventually its revised policy will effectively control these diseases throughout the country.

TABLE 1  
INCIDENCE OF VENEREAL DISEASES IN  
PAPUA NEW GUINEA 1971-72

| District              | Gonorrhoea | Syphilis | Donovanosis | Total |
|-----------------------|------------|----------|-------------|-------|
| Bougainville ..       | 62         | 2        | 3           | 67    |
| Central ..            | 411        | 52       | 340         | 803   |
| Chimbu ..             | 283        | 543      | 4           | 830   |
| East New Britain ..   | 374        | 3        | 4           | 381   |
| East Sepik ..         | 20         | ..       | 8           | 28    |
| Eastern Highlands ..  | 732        | 627      | 8           | 1,367 |
| Gulf ..               | 2          | ..       | 3           | 5     |
| Madang ..             | 46         | ..       | 6           | 52    |
| Manus ..              | 13         | ..       | ..          | 13    |
| Milne Bay ..          | 9          | ..       | ..          | 9     |
| Morobe ..             | 558        | 329      | 38          | 925   |
| New Ireland ..        | 16         | ..       | ..          | 16    |
| Northern ..           | 20         | 2        | 4           | 26    |
| Southern Highlands .. | 135        | 81       | ..          | 216   |
| Western ..            | 11         | ..       | 4           | 15    |
| Western Highlands ..  | 430        | 418      | ..          | 848   |
| West Sepik ..         | ..         | ..       | ..          | ..    |
| West New Britain ..   | 1          | ..       | ..          | 1     |
| Total ..              | 3,123      | 2,057    | 422         | 5,602 |

*Quarantine Services.* At present the quarantine services are the responsibility of the health services in each district, there being as yet no permanent quarantine staff either at headquarters or at district level, and the duties vary with the size of the town, its international connections by air and sea and its overland routes. Quarantine work is carried out by the district health officers, health inspectors, health extension officers and other medical officers if the port is near a larger hospital such as those at Lae and Rabaul. Fast modern transportation brings people to, or through, Papua New Guinea within days,

from all over the world, and with them the added risk of communicable diseases.

TABLE 2  
VACCINATIONS GIVEN AT DISTRICT  
HOSPITALS DURING THE YEAR ENDING  
31 MARCH 1972

| District Hospital | Smallpox | Cholera | Yellow<br>Fever | Gamma<br>Globulin |
|-------------------|----------|---------|-----------------|-------------------|
| Vanimo ..         | 861      | 947     | ..              | ..                |
| Wewak ..          | 139      | 200     | ..              | 9                 |
| Madang ..         | 322      | 694     | ..              | ..                |
| Lae ..            | 758      | 747     | 37              | ..                |
| Lotengau ..       | ..       | ..      | ..              | ..                |
| Nonga ..          | 447      | 619     | ..              | ..                |
| Kieta ..          | 74       | 130     | ..              | ..                |
| Kimbe ..          | ..       | ..      | ..              | ..                |
| Kavieng ..        | 79       | 184     | ..              | ..                |
| Ponopondetta ..   | 30       | 60      | ..              | ..                |
| Alotau ..         | 21       | 23      | ..              | ..                |
| Port Moresby ..   | 984      | 2,097   | 50              | 2                 |
| Kerema ..         | 8        | 32      | ..              | ..                |
| Daru ..           | 22       | 46      | ..              | ..                |
| Goroka ..         | 95       | 223     | ..              | 144               |
| Kundiawa ..       | ..       | ..      | ..              | ..                |
| Mount Hagen ..    | (a)      | (a)     | (a)             | (a)               |
| Mendi ..          | 74       | 18      | ..              | ..                |
| Total ..          | 3,914    | 6,020   | 87              | 155               |

(a) Figures not available

In May 1972 cholera was reported from West Irian and action along the border to protect Papua New Guinea included the immunisation of village people in areas where border crossing is common, the training of health workers in the recognition and management of cholera patients, action to improve environmental sanitation along the border, the purchase of additional medical supplies which would be needed for the treatment of cholera, replanning quarantine camps, and increased vigilance to detect people coming into Papua New Guinea from West Irian. This outbreak of cholera was confirmed by the West Irian Health authorities. Reported cases of smallpox from Mindiptanah, adjacent to the Western District of Papua, were thought to be chickenpox but protective vaccination was carried out in the area of the Western District opposite Mindiptanah.

Plans are now being drawn up for new quarantine camps at Pagei and Yako in the West Sepik. Quarantine procedures were reviewed during the year, to facilitate the preparation of a 'Manual for Quarantine Officers'.

#### Nutrition

Activities in the field of nutrition have expanded considerably throughout the country during the past year, varying in their scope with the problems, available resources and level of knowledge of the particular regions, and with the interest of health personnel.

The general aims of the section are:

1. Incorporation in the training courses for nurses, nurse-aides, medical orderlies and aid post orderlies of instruction in the principles of nutrition and methods of education.
2. Evaluation of the country's nutritional state, consideration of the effects of medical, agricultural and social factors on nutrition and determination of the extent of malnutrition.
3. Improvement of treatment and rehabilitation of malnourished children.
4. The study of local food patterns and promotion of low-cost, high-value protein and other foods.
5. Liaison between the Departments of Public Health, Agriculture, Social Development and Education, to promote activities for the improvement of nutrition.
6. Continuation of efforts to improve the food supply situation in regard to both quantity and quality.

*Nutrition Training.* Nine training courses in Papua New Guinea include the study of nutrition. The enrolled and registered nurses, community health nurses, nurse aides, pre-school teachers, health educators, dental officers and dental assistants trained and employed by the Department of Public Health, are all expected to understand and apply their basic knowledge of food and nutrition to the specific situations in which they work. The syllabi have been continuously revised, assistance has been given to those requesting teaching materials and a preliminary revision of the present nutrition notes for nursing students forms the basis of a booklet suitable for most parts of the country.

No in-service training courses in nutrition were held this year for Health Department staff. However, several district maternal and child health staff have had extra tuition at clinics on early assessment of malnutrition, local food values and nutrition education. Nutrition classes were continued at the Teachers' College at Port Moresby, in the welfare officers' training courses and in other small groups. A 1-day workshop was held for science and home science teachers in the Central District. The work of the 2 members of the nutrition staff of the Department of Public Health included a total of 560 hours' teaching.

A 16-mm colour film on 'Child Nutrition' was made in Goroka during the year, and is available for general use.

Some of the local edible green leaves have been identified and analysed, including those which are not considered as garden food but which may form a large proportion of the vegetable intake. In some cases these leaves contain reasonable quantities of protein and iron.

High-protein milk cookies are now available in Papua New Guinea, and clinics and health centres have been asked to encourage their consumption in preference to the dry or sweet biscuit. A locally-made cookie has been produced, but is not yet a commercial proposition.

Nutritional assessments were made in 3 Highlands districts and the Northern and Central districts. These showed a wide variation in the degree of malnutrition even among people living close to each other. All types of protein-calorie malnutrition were seen. A few vitamin deficiencies, particularly vitamin-A deficiency, were also found. Iron deficiency is common and some highland areas still have endemic goitre (iodine deficiency).

Reports have come in from the Southern and Eastern Highlands, West Sepik and Gulf Districts of sporadic food shortages, but nutritional assessments have not yet been made. Many Health Department officers do not find the task of nutritional assessment an easy one, and information on malnutrition is usually limited to questionable hospital statistics.

*Treatment and Rehabilitation of Malnutrition.* Admissions to hospitals or health centres because of malnutrition are recorded in the table below, but give only a superficial view of the problem. Many health workers may still not recognise protein-calorie or other deficiencies, and for every case detected there may be many others requiring treatment and nutrition education, which go unnoticed.

Treatment given depends on the food supply at each hospital or health centre. Hospitals at Port Moresby, Lae, Madang, Goroka, Kundiawa and Mount Hagen have malnutrition wards which give a balanced diet, based on local foods, to all malnourished children. While in the hospital, the guardians are taught which foods to give their children.

The rehabilitation unit is the ideal method of coping with malnutrition cases. It should

preferably be set apart from the hospital and should retain children and guardians for several weeks after hospital treatment is completed, to convince parents that food is the only cure for the child's sickness. Such units attempt to reproduce the local living conditions and food situation as far as possible. Apex and Rotary clubs, local government councils and the Foundation for the Peoples of the South Pacific have all assisted in setting up nutrition rehabilitation units in Lae, Goroka and Port Moresby.

*Local Food Patterns.* A grant from the Nestle Company has enabled the section to initiate a study of infant feeding practices, which will be carried out over a period of several years. Food-intake studies have been made in the Highlands and in Northern District on a small sample of households. Intakes of calories, protein and iron tend to be below the recommended international requirements, but are close to the standards developed by WHO for the Western Pacific region.

CHILD ADMISSIONS TO HOSPITALS AND HEALTH CENTRES OWING TO MALNUTRITION DURING 1971-72

| District                  | Percentage of total child admissions (under 5 years) for protein-calorie malnutrition | Percentage of total child admissions (under 5 years) for protein-calorie malnutrition with concurrent infections |
|---------------------------|---|--|
| Western .. ..             | 20.0  | 23.0   |
| Gulf .. ..                | 5.0   | ..   |
| Central .. ..             | 28.0  | 43.0   |
| Milne Bay .. ..           | 12.0  | 3.0  |
| Northern .. ..            | 29.0  | 9.0  |
| Morobe* .. ..             | 6.0   | 0.5  |
| Eastern Highlands .. ..   | 17.0  | 2.0  |
| Western Highlands* .. ..  | 31.0  | 17.5   |
| Southern Highlands* .. .. | 10.0  | 6.0  |
| Chimbu .. ..              | 68.0  | 30.0   |
| East Sepik* .. ..         | 66.0  | 13.0   |
| West Sepik .. ..          | 48.0  | 10.0   |
| Madang .. ..              | 14.0  | 18.0   |
| East New Britain .. ..    | 46.0  | 18.0   |
| West New Britain* .. ..   | 11.0  | 63.0   |
| New Ireland* .. ..        | 3.0   | 0.5  |
| Bougainville* .. ..       | 34.0  | 17.0   |
| Manus* .. ..              | 4.0   | 3.0  |

\* Based on statistics obtained from three or fewer health centres.

*Food Supply and Distribution.* There should be no lack of food in the country but occasionally cargo cults, special feasts and festivals, cyclones and earthquakes create difficulties in maintaining food supplies in some areas. In times of food shortage, poor communications make the distribution of relief supplies expensive and difficult. Attempts are being made to process various foods by simple methods, with a view to increasing the supply of seasonal food. Urbanisation is also creating nutritional problems due to changed food habits and high costs.

*Activities to Improve Nutrition.* Legislation is still being drafted, covering both local and imported foods, to establish international standards suitable for the country. Nutritional enrichment of rice, flour and other foods is already enforced.

The Department of Agriculture has been instrumental in establishing gardens connected with rehabilitation units, in encouraging council nutrition projects and in collecting and analysing food samples. Despite the strong emphasis on cash cropping it is possible to persuade people to expand their food gardens, and food crop agronomists are prepared to assist with the development of better quality vegetable crops. Many of the women's clubs organised by the Department of Social Development and Home Affairs, particularly in the Highlands, have asked for assistance in the field of nutrition, and have begun to implement the new methods and ideas. These clubs are particularly effective in creating interest in the use of different foods and in teaching nutrition concepts.

The Education Department has a nutrition section in the new health syllabus, which is being expanded to include several practical nutrition exercises. Many schools have bought milk cookies for sale to children, and the interest of the schools in the cookies, and in nutrition in general, has been encouraging.

In practice, the Health Department relies on the maternal and child health service for extension of nutrition services. The staff have a responsibility to use weight charts regularly and to encourage mothers to utilise every locally-available food to improve nutritional standards. Children with malnutrition are referred to health centres, and many areas now organise a home-visiting service to continue practical nutrition education and assist the families concerned.

*General.* During the year visitors to Papua New Guinea included Dr A. A. J. Jansen (WHO, Fiji), who came to assist in teaching nutrition to medical and paramedical students, and Dr K. V. Bailey (WHO Manila), and Dr E. Hipsley (Australian Institute of Anatomy, Canberra) who visited the section while attending the Sixth Waigani Seminar at Port Moresby.

Research on various aspects of nutrition is continuing and covers child growth and development, food analysis, supplementary feeding, nitrogen and electrolyte balance, nutrition education materials and nutritional assessment techniques.

The recent establishment of positions for four additional members of the nutritional staff will enable the section to undertake more effective training and extension work.

#### *Dental Services*

In line with changes occurring throughout the Department, 3 important developments have taken place this year within Dental Services. They are the preparation of the Basic Policy Document—Dental Health Services, the report of the Expert Committee on Dental Education and Training, and the preparation of a submission to be included in the preparatory document for the National Health Plan. The aim of these developments is to integrate dental health services with the main stream of health services, and to make more rational use of available resources, a policy which shows the way for many developed countries whose dental services remain divorced from health services.

*The Basic Policy Document—Dental Health Services.* The document re-emphasises the preventive role of the school dental service, but proposes to extend the service to include secondary schools and other older age groups. This and similar documents would enable the District Health Officer to co-ordinate all activities and to deploy his resources more fruitfully, according to overall priorities.

*The Expert Committee to Review Dental Education and Training.* To enable it to plan the type of education and training to be provided at the Port Moresby Dental College, the committee considered the need and demand for dental services assessed in the available documents. With this as a basis, the committee then considered the categories and numbers of dental personnel required, and the type of education and training which dental practitioners, dental therapists and dental



A 16-mm colour film on 'Child Nutrition' was made in Goroka during the year, and is available for general use.

Some of the local edible green leaves have been identified and analysed, including those which are not considered as garden food but which may form a large proportion of the vegetable intake. In some cases these leaves contain reasonable quantities of protein and iron.

High-protein milk cookies are now available in Papua New Guinea, and clinics and health centres have been asked to encourage their consumption in preference to the dry or sweet biscuit. A locally-made cookie has been produced, but is not yet a commercial proposition.

Nutritional assessments were made in 3 Highlands districts and the Northern and Central districts. These showed a wide variation in the degree of malnutrition even among people living close to each other. All types of protein-calorie malnutrition were seen. A few vitamin deficiencies, particularly vitamin-A deficiency, were also found. Iron deficiency is common and some highland areas still have endemic goitre (iodine deficiency).

Reports have come in from the Southern and Eastern Highlands, West Sepik and Gulf Districts of sporadic food shortages, but nutritional assessments have not yet been made. Many Health Department officers do not find the task of nutritional assessment an easy one, and information on malnutrition is usually limited to questionable hospital statistics.

*Treatment and Rehabilitation of Malnutrition.* Admissions to hospitals or health centres because of malnutrition are recorded in the table below, but give only a superficial view of the problem. Many health workers may still not recognise protein-calorie or other deficiencies, and for every case detected there may be many others requiring treatment and nutrition education, which go unnoticed.

Treatment given depends on the food supply at each hospital or health centre. Hospitals at Port Moresby, Lac, Madang, Goroka, Kundiawa and Mount Hagen have malnutrition wards which give a balanced diet, based on local foods, to all malnourished children. While in the hospital, the guardians are taught which foods to give their children.

The rehabilitation unit is the ideal method of coping with malnutrition cases. It should

preferably be set apart from the hospital and should retain children and guardians for several weeks after hospital treatment is completed, to convince parents that food is the only cure for the child's sickness. Such units attempt to reproduce the local living conditions and food situation as far as possible. Apex and Rotary clubs, local government councils and the Foundation for the Peoples of the South Pacific have all assisted in setting up nutrition rehabilitation units in Lae, Goroka and Port Moresby.

*Local Food Patterns.* A grant from the Nestle Company has enabled the section to initiate a study of infant feeding practices, which will be carried out over a period of several years. Food-intake studies have been made in the Highlands and in Northern District on a small sample of households. Intakes of calories, protein and iron tend to be below the recommended international requirements, but are close to the standards developed by WHO for the Western Pacific region.

CHILD ADMISSIONS TO HOSPITALS AND HEALTH CENTRES OWING TO MALNUTRITION DURING 1971-72

| District                  | Percentage of total child admissions (under 5 years) for protein-calorie malnutrition | Percentage of total child admissions (under 5 years) for protein-calorie malnutrition with concurrent infections |
|---------------------------|---|--|
| Western .. ..             | 20.0  | 23.0   |
| Gulf .. ..                | 5.0   | ..   |
| Central .. ..             | 28.0  | 43.0   |
| Milne Bay .. ..           | 12.0  | 3.0  |
| Northern .. ..            | 29.0  | 9.0  |
| Morobe* .. ..             | 6.0   | 0.5  |
| Eastern Highlands .. ..   | 17.0  | 2.0  |
| Western Highlands* .. ..  | 31.0  | 17.5   |
| Southern Highlands* .. .. | 10.0  | 6.0  |
| Chimbu .. ..              | 68.0  | 30.0   |
| East Sepik* .. ..         | 66.0  | 13.0   |
| West Sepik .. ..          | 48.0  | 10.0   |
| Madang .. ..              | 14.0  | 18.0   |
| East New Britain .. ..    | 46.0  | 18.0   |
| West New Britain* .. ..   | 11.0  | 63.0   |
| New Ireland* .. ..        | 3.0   | 0.5  |
| Bougainville* .. ..       | 34.0  | 17.0   |
| Manus* .. ..              | 4.0   | 3.0  |

\* Based on statistics obtained from three or fewer health centres.

*Food Supply and Distribution.* There should be no lack of food in the country but occasionally cargo cults, special feasts and festivals, cyclones and earthquakes create difficulties in maintaining food supplies in some areas. In times of food shortage, poor communications make the distribution of relief supplies expensive and difficult. Attempts are being made to process various foods by simple methods, with a view to increasing the supply of seasonal food. Urbanisation is also creating nutritional problems due to changed food habits and high costs.

*Activities to Improve Nutrition.* Legislation is still being drafted, covering both local and imported foods, to establish international standards suitable for the country. Nutritional enrichment of rice, flour and other foods is already enforced.

The Department of Agriculture has been instrumental in establishing gardens connected with rehabilitation units, in encouraging council nutrition projects and in collecting and analysing food samples. Despite the strong emphasis on cash cropping it is possible to persuade people to expand their food gardens, and food crop agronomists are prepared to assist with the development of better quality vegetable crops. Many of the women's clubs organised by the Department of Social Development and Home Affairs, particularly in the Highlands, have asked for assistance in the field of nutrition, and have begun to implement the new methods and ideas. These clubs are particularly effective in creating interest in the use of different foods and in teaching nutrition concepts.

The Education Department has a nutrition section in the new health syllabus, which is being expanded to include several practical nutrition exercises. Many schools have bought milk cookies for sale to children, and the interest of the schools in the cookies, and in nutrition in general, has been encouraging.

In practice, the Health Department relies on the maternal and child health service for extension of nutrition services. The staff have a responsibility to use weight charts regularly and to encourage mothers to utilise every locally-available food to improve nutritional standards. Children with malnutrition are referred to health centres, and many areas now organise a home-visiting service to continue practical nutrition education and assist the families concerned.

*General.* During the year visitors to Papua New Guinea included Dr A. A. J. Jansen (WHO, Fiji), who came to assist in teaching nutrition to medical and paramedical students, and Dr K. V. Bailey (WHO Manila), and Dr E. Hipsley (Australian Institute of Anatomy, Canberra) who visited the section while attending the Sixth Waigani Seminar at Port Moresby.

Research on various aspects of nutrition is continuing and covers child growth and development, food analysis, supplementary feeding, nitrogen and electrolyte balance, nutrition education materials and nutritional assessment techniques.

The recent establishment of positions for four additional members of the nutritional staff will enable the section to undertake more effective training and extension work.

#### *Dental Services*

In line with changes occurring throughout the Department, 3 important developments have taken place this year within Dental Services. They are the preparation of the Basic Policy Document—Dental Health Services, the report of the Expert Committee on Dental Education and Training, and the preparation of a submission to be included in the preparatory document for the National Health Plan. The aim of these developments is to integrate dental health services with the main stream of health services, and to make more rational use of available resources, a policy which shows the way for many developed countries whose dental services remain divorced from health services.

*The Basic Policy Document—Dental Health Services.* The document re-emphasises the preventive role of the school dental service, but proposes to extend the service to include secondary schools and other older age groups. This and similar documents would enable the District Health Officer to co-ordinate all activities and to deploy his resources more fruitfully, according to overall priorities.

*The Expert Committee to Review Dental Education and Training.* To enable it to plan the type of education and training to be provided at the Port Moresby Dental College, the committee considered the need and demand for dental services assessed in the available documents. With this as a basis, the committee then considered the categories and numbers of dental personnel required, and the type of education and training which dental practitioners, dental therapists and dental

technicians should have, to meet the estimated need and demand. The details of course content, and the cost of the proposed dental school/hospital complex still have to be determined, but the work of the committee provides sufficient basis for further deliberation, negotiation and action.

*The National Health Plan—Dental Health Services.* Although the task has by no means been completed at the time of writing, the outlines of the submission have been prepared. These include epidemiology, the history of the dental health services, the level of staff (operator/patient ratio), the categories of staff at present employed, future projections, and so on.

*School Dental Service.* Despite the increased demand for dental work for other than school-service patients, it was possible to introduce the 'brush-in' technique in a number of centres. This method of self-application of fluoride-containing prophylaxis paste (9-10 per cent conc.) was developed by Dr J. Muhler of Indiana University. It is simple, does not require trained manpower, and reduces tooth decay if followed at yearly intervals.

*Dental Manpower.* An increase in staff by 4 local dental officers was partially offset by the loss of the services of 3 experienced officers during the year. The 4 graduates are now working to fulfil their pre-registration requirements.

The main work force of the Dental Services is the dental therapist. There was only a very slight increase in the number during the year. Two tragic deaths, resignations, and the fact that only 4 dental therapists graduated

last year, explain the comparatively small increase in output.

There was only 1 dental technician graduate, who is now undertaking a course in technical aspects of the construction of maxillo-facial prostheses in Brisbane. This category of worker is apparently under-utilised, and to try to minimise this the Expert Committee considered expanding the duties of dental technicians.

No formal training has been provided so far for dental orderlies. Although they perform very mundane activities, dental orderlies, when trained on the job, are of tremendous help to dental officers and dental therapists.

*Dental Clinics.* There are 45 fixed clinics and 3 mobile dental clinics throughout Papua New Guinea. These clinics are staffed by 17 dental officers, 57 dental therapists, 16 dental technicians, and 56 dental orderlies. The slight increase in the level of staff resulted in only a very slight increase in work performance. Many factors contributed to the almost static state, but the main ones appear to be the loss of experienced regional dental officers, lack of logistic support, and the shortage of suitable staff for supervision of the operating auxiliaries, especially the inability of the service to fill in leave vacancies.

*Dental Education and Training.* Recruitment of students for the Dental Officer Course at the Port Moresby Dental College has been a problem for the last 3 years. The Expert Committee noted this unsatisfactory situation and made specific recommendations. With the impending tabling of the committee's report and subsequent action, it is anticipated that the situation will improve.

TABLE I  
DENTAL STAFF EMPLOYED BY THE DEPARTMENT OF PUBLIC HEALTH  
AT JUNE 1972

| Category          | In service |            |            | Training   |           |           | Totals     |            |            |
|-------------------|------------|------------|------------|------------|-----------|-----------|------------|------------|------------|
|                   | Expatriate | Local      | Total      | Expatriate | Local     | Total     | Expatriate | Local      | Total      |
| Dental officer .. | 14         | (a) 10     | 24         | 4          | ..        | 4         | 18         | 10         | 28         |
| Dental therapist  | 1          | (b) 57     | 58         | ..         | 2         | 2         | 1          | 59         | 60         |
| Dental technician | ..         | (b) 16     | 16         | 1          | 1         | 2         | 1          | 17         | 18         |
| Dental orderly .. | ..         | 56         | 56         | ..         | ..        | ..        | ..         | 56         | 56         |
| Other ..          | 3          | 1          | 4          | 3          | 10        | 13        | 6          | 11         | 17         |
| <b>Total ..</b>   | <b>18</b>  | <b>140</b> | <b>158</b> | <b>8</b>   | <b>13</b> | <b>21</b> | <b>26</b>  | <b>153</b> | <b>179</b> |

(a) Includes resident dental officers. (b) Includes enrolled as well as registered auxiliaries.

There were 27 students undergoing the Dental Therapist course at the beginning of the year. The tragic death of a first-year student has reduced the number to 26, 16 in the first year and 10 in the second year.

Recruitment of dental technicians has not been a problem in terms of numbers. However, the present educational standard of entry has given rise to teaching difficulties. The apparent under-utilisation of dental technicians was of concern to the Expert Committee, and the deliberations of the committee culminated in specific recommendations to overcome the problem. Three 3rd-year, 3 2nd-year and 5 1st-year students are currently undergoing dental technician training.

Below are figures which reflect this year's performance compared with that of last year:

TABLE 2  
DENTAL STATISTICS

|                           | School service |         | General service |         |
|---------------------------|----------------|---------|-----------------|---------|
|                           | 1970-71        | 1971-72 | 1970-71         | 1971-72 |
| Initial examinations ..   | 42,095         | 35,905  | ..              | ..      |
| Revision examinations ..  | 42,229         | 42,020  | ..              | ..      |
| Treatments completed ..   | 79,449         | 81,887  | ..              | ..      |
| Extractions ..            | 9,472          | 12,274  | 29,635          | 21,797  |
| Restorations ..           | 38,352         | 30,006  | 18,090          | 28,867  |
| Periodontal treatments .. | 28,847         | 18,177  | 5,211           | 4,343   |
| Total attendances ..      | 85,333         | 76,378  | 42,190          | 51,700  |

*Studies Abroad.* Dr B. Taukura and Dr G. Wolter are undertaking post-graduate studies at the University of Otago, Dunedin, New Zealand. Dr E. Seal obtained his DDPH, RCS (England), and Dr G. Gris obtained his MPH from the University of Michigan.

#### *Pre-School Services*

The pre-school centres in Papua New Guinea provide children of pre-school age with an education which is appropriate to their particular stage of development. At the pre-school centre a trained teacher helps each child to develop both as an individual and as a group member. Children are helped to meet new situations, to develop a wide range of skills and abilities which can be used for the benefit of themselves and others, and to obtain new knowledge in a changing environment.

Currently 45 pre-schools are operating in urban areas, with a total enrolment of 2,125 children. The centres are classified as follows:

*'A'-type Centres.* These are staffed by expatriate trained teachers and run an Australian-type programme for English-speaking children. They are attended mainly

by expatriate children although all races are eligible to attend. Management is by local committees who determine attendance fees, employ an assistant to help the trained teacher, and generally deal with the practical aspects of running a centre. The 19 'A'-type centres, attended by 900 children, are located in Port Moresby, Lae, Rabaul, Madang, Wewak, Kavieng, Goroka, Mount Hagen, Wau, Bulolo and Kainantu. Four 'A'-type centres are used by 'T' pre-school groups for afternoon sessions.

*'T'-type Centres.* These provide a programme suitable for Papua New Guinean children speaking English as a second language. They are staffed by Papua New Guinean trained teachers. The Government supplies all expendable equipment and parents pay a law fee for attendance. One thousand children attend 21 'T' pre-school groups in Port Moresby, Rabaul, Lae, Madang, Wewak, Kavieng, Goroka, Mount Hagen and Bulolo.

*'S'-type Centres.* These operate with an untrained supervisor in areas where there are insufficient children to warrant the appointment of a trained teacher, although some will, in time, achieve this. These centres, which have met the basic requirements laid down by the Department of Public Health, receive a subsidy from the Government amounting to \$20 per child per annum. 'In-service' training is conducted annually at 'S' centres when a trained teacher works with the supervisor for one week demonstrating and bringing new ideas and insight to the children's programme. The 9 'S'-type centres are in Samarai, Daru, Popondetta, Port Moresby, Lorengau, Lombrum, Kundiawa, Mendi and Panguna.

New pre-school centres which have been established at Arawa, Kieta, Kimbe and Keravat, are working to the required standard to qualify for recognition by the Department of Health.

*Staffing.* The year 1971-72 was a difficult one in relation to recruitment of overseas pre-school teachers and although 5 vacancies were advertised for the 1972 school year, only one teacher arrived in the country. As only 3 teachers graduated from the Pre-School Teacher Training Course in December 1971, it was not possible to meet all staffing requirements for trained pre-school teachers and it has been necessary to employ 5 teachers with other teaching qualifications.

PRE-SCHOOL STAFF AND ESTABLISHMENT  
AT 30 JUNE 1971

| Category                                    | Local | Overseas |
|---|-------|----------|
| Pre-School Officer .. ..                    | ..    | 1        |
| Assistant Pre-School Officer Training .. .. | ..    | 1        |
| Training Officer .. ..                      | ..    | 4        |
| Pre-School Teacher.. ..                     | 11    | 18       |
| Pre-School Assistant .. ..                  | 10    | ..       |

*Pre-School Teachers Training Course.* The 1972 academic year saw an appreciable increase in the number of school leavers interested in training as pre-school teachers, and 14 students were accepted into the first year of the Course. Eight students are currently in second year, and 3 in third year. Working with physically-handicapped children at the Red Cross Centre was included to a limited degree in the 1971 training syllabus. In 1972, this has been further developed to include working with a speech therapist and a group of deaf children, and with a trained teacher of the handicapped and a physiotherapist at the Cheshire Home. An addition to the second-year syllabus has been a programme of involvement with the Hospital Home Visiting Service, community development officers, social workers and the Community Development Group. It is hoped that through these contacts the students will gain a clearer understanding of the work of other departments and organisations involved in community service.

Emphasis on language development continues to be a matter of primary importance to teachers of Papua New Guinean children in pre-schools. In order to assist teachers in their planning of appropriate language experiences, a 'Guide to Language Development in the Pre-School' is being prepared. Advice and assistance for this project has been given by Professor F. Johnson of the University of Papua New Guinea. This 'Guide' will form the basis for a series of lectures by Professor Johnson on teacher techniques to be used in presenting language experiences.

*Mail Box.* The 'Mail Box' scheme provides a pre-school service for children who live on outstations and who are unable to attend a pre-school. Families enrolled in this scheme receive regular parcels containing library books for children, parent guidance material and information about pre-school activities

which can be conducted in the home. Fifty-four families were enrolled in 'Mail Box' in 1971-72.

*Development and Expansion.* One criticism of the pre-school service in its present form is that it is too 'high cost' for a developing country. The onus of providing a suitable building is on the parents, and it is unrealistic to expect Papua New Guinean parents to raise the necessary finance when building costs are so high. With this in mind the Pre-School Section is currently investigating the possibilities of extending pre-school services in an inexpensive and effective way involving more parent and community participation. Information is being sought from other developing countries relating to types of programmes which have been found to be appropriate and which could be adopted for use in Papua New Guinea.

As a result of an enquiry to the School of Education, Macquarie University, Sydney, Australia, concerning the suitability of current pre-school programmes provided for Papua New Guinea children, a survey of cognitive-development of pre-school children will shortly be carried out in the Goroka area. Analysis of baseline data obtained from this research will be used in future planning of appropriate pre-school programmes.

## CHAPTER 8

### NARCOTIC DRUGS

Narcotic drugs are neither manufactured nor produced in, nor exported from Papua New Guinea. Importation is controlled by the *Dangerous Drugs Ordinance 1952-1970*. (Power to prohibit the importation of dangerous drugs also exists under the Customs Ordinance, but in practice the Dangerous Drugs Ordinance provides a sufficient measure of control.) Labelling, distribution and sale are controlled under the *Poisons and Dangerous Substances Ordinance 1952-1967*. The *Medical Ordinance 1952-1963* provides for the registration of pharmacists and the *Pharmacy Ordinance 1952-1953* regulates the practice of pharmacy.

The importation of dangerous drugs is not permitted without a licence from the Administrator. Adequate safeguards are prescribed for the receipt, storage and sale of these drugs and their use is strictly limited.

The following conventions relating to narcotics have been applied to Papua New Guinea:

International Convention relating to Dangerous Drugs, with Protocol 1925;

International Convention of Limiting the Manufacture and Regulating the Distribution of Narcotic Drugs 1931 and Protocol of 1948;

Protocol for Limiting and Regulating the Cultivation of the Poppy Plant, the Production of, International and Wholesale Trade in, and Use of Opium;

Single Convention on Narcotic Drugs 1961.

The following quantities of opium and its derivatives and other dangerous drugs were imported during the year, solely for medicinal purposes:

|                          | Grammes |
|--------------------------|---------|
| Opium in Preparations .. | 15,520  |
| Pethidine .. .. .        | 4,044   |
| Normethadone .. .. .     | 106     |
| Codeine .. .. .          | 622     |
| Morphine .. .. .         | 75      |
| Pholcodine .. .. .       | 48      |
| Methadone .. .. .        | 18      |
| Cocaine .. .. .          | 1       |
| Dihydrocodeine .. .. .   | 12      |
| Dextromoramide .. .. .   | 8       |
| Hydrocodone .. .. .      | 58      |

The importation of diacetylmorphine (heroin) is prohibited for all purposes. The importation of lysergic acid and its salts, dimethyltryptamine, and all other hallucinogens is prohibited except for special use by psychiatrists approved by the Director of Public Health.

## CHAPTER 9

### DRUGS

The distribution, storage, use and sale of drugs and pharmaceuticals are controlled by the *Poisons and Dangerous Substances Ordinance* 1952-1967 and Regulations, and the Ordinances referred to in the preceding chapter.

The *Drugs Ordinance* 1952 and Regulations prescribe standards for drugs.

## CHAPTER 10

### ALCOHOL AND SPIRITS

#### *Legislation*

The following legislation provides for the control of the production and distribution of alcoholic liquor:

*Excise Ordinance* 1956-1971

*Excise (Beer) Ordinance* 1952-1960

*Liquor (Miscellaneous Provisions) Ordinance* 1963

Under the Excise Ordinance the manufacture or distillation of alcoholic liquor is subject to licensing by the Comptroller of Customs. The Excise (Beer) Ordinance provides for the licensing of brewers and prescribes the conditions to be observed in the brewing of beer.

The Liquor (Licensing) Ordinance controls the licensing of premises and the sale of liquor. The law applies equally to all people in Papua New Guinea.

The Ordinance provides that the Administrator may declare a part of Papua New Guinea to be a licensing district and also provides for the establishment of a Liquor Licensing Commission consisting of a chairman appointed by the Minister of State for External Territories and 2 Commissioners for each licensing district appointed by the Administrator, only one of whom may be an officer of the Public Service. The 18 administrative Districts of Papua New Guinea have been declared licensing districts, and Commissioners (including 4 New Guineans) have been appointed for them.

The sale of liquor is prohibited except under licence or other authority issued in accordance with the Ordinance. The Commission is empowered to hear and determine applications for the grant, renewal, transfer or removal of a licence or the grant of a certificate, authority or permit, and to determine the trading hours under, or the conditions of, a licence, and related matters. Appeal from a decision of the Commission may be made to the Supreme Court. The Chairman of the Commission is required to make an annual report to the Administrator on the operation of the Ordinance.

The Ordinance also provides for the appointment of a Chief Licensing Inspector, and licensing inspectors for specified districts, for the purposes of administering the Ordinance.

The Administration provides financial and other forms of assistance to organisations conducting campaigns of temperance education in Papua New Guinea.

#### *Import Duties*

The following import duties are levied on alcoholic liquors:

- (i) *Ales, beers, etc.*
  - (a) \$1.45 per gallon.
  - (b) For corresponding non-alcoholic beverages, 25 cents per gallon.
- (ii) *Spirits and spirituous liquors*
  - (a) When not exceeding the strength of proof, \$15.00 per gallon.
  - (b) When exceeding the strength of proof, \$15.00 per proof gallon.
- (iii) *Wines*
  - (a) Grape, sparkling, \$4.50 per gallon.
  - (b) Grape, still containing less than 27 per cent proof spirit, 50 cents per gallon.
  - (c) Grape, still, including medicated and vermouth, \$1.00 per gallon.
  - (d) Grape, unfermented, 10 per cent *ad Valorem*.
  - (e) Other than grape, not elsewhere included, including sake and samshu—
    - (1) when not exceeding the strength of proof, \$3.90 per gallon.
    - (2) when exceeding the strength of proof, \$5.60 per proof gallon.
  - (f) For sacramental purposes—50 per cent of the specified appropriate duty rate.

#### *Liquor Commission into Alcoholic Drink*

A Commission of Inquiry into Alcoholic Drink was appointed on 23 August 1971 under the *Commission of Inquiry Ordinance 1951-1971* to investigate and report on alcoholic drink in Papua New Guinea and, in particular, on its effects on economic circumstances, health and social behaviour including crime. The commission, which submitted its report to the Administrator on 22 December 1971, prepared and extensively circulated a comprehensive questionnaire on the sale and consumption of liquor, sat to hear evidence in centres throughout Papua New Guinea and travelled overseas (to Fiji, the New Hebrides, BSIP, West Irian and Australia) for discussions with various authorities.

The commission recommended, among other things, that full-time licensing inspectors be appointed; that a Police Liquor Branch be established; that customs duties on spirits and fortified wines be increased; that the permitted alcohol content of beer be fixed at 3.5 per cent by weight and that trading hours for hotels, taverns and clubs be shortened. It was also recommended that licence fees be calculated as a percentage on turnover and that at least part of the money thus obtained be used to establish and operate a permanent programme of research into the medical and social effects of alcohol to finance formal and community education and training on alcohol and to provide facilities for specialist treatment as it becomes necessary.

At the end of the period under review in this Report, the recommendations of the Commission were being examined by the Administrator's Executive Council and members of the public were being given an opportunity to express their views.

## CHAPTER 11

### HOUSING AND TOWN AND COUNTRY PLANNING

#### *Ministerial Responsibility*

During the year under review the Papua New Guinea Ministry exercised full authority and final responsibility in respect of the Housing Commission, Papua New Guinea Government hostels, housing for local officers, and town and country planning.

The Administering Authority retained responsibility for housing for overseas officers, Australian Government hostels and the provision of housing assistance under the Australian War Service Homes Act.

During the life of the Second House of Assembly, housing fell within the responsibilities of the Assistant Ministerial Member for Social Development and Home Affairs, Mr Wesani Iwoksini, MHA. Housing now falls within the responsibilities of the Minister for the Interior, Dr John Guise, CBE, MHA.

In the Second House of Assembly the Assistant Ministerial Member for Lands and Surveys, Mr Andrew Andagari Wabiria, MHA, was responsible for town and country planning. This responsibility is now held by the Minister for Lands and Environment, Mr Albert Maori Kiki, MHA.

### *Legislation*

The legislation governing town planning and housing is:

(i) The *Town Boundaries Ordinance* 1951-1952 under which the Administrator may declare a place in Papua New Guinea to be a town and set forth and declare the boundaries of a town;

(ii) the *Town Planning Ordinance* 1952-1959 which provides for the planning and development of towns, the establishment of a town planning board and the division of towns into zones for residential, commercial, industrial and other purposes;

(iii) the *Place Names Ordinance* 1965 which establishes a committee empowered to assign a name to any place in Papua New Guinea and to alter any existing name;

(iv) the *Papua and New Guinea Housing Commission Ordinance* 1967;

(v) the *Papua and New Guinea Housing Loans Ordinance* 1953-1963;

(vi) the *Native Employment Ordinance* 1958-1967; and

(vii) the *Papua and New Guinea Housing Commission Ordinance* 1967.

New town planning legislation is under consideration.

### *Town Planning*

Authority to supervise the planning and zoning of towns is vested in the Town Planning Board which is advised by a town planner. Major developments schemes have been prepared for Port Moresby and Lae. Many smaller Highlands centres have now been planned. Planning for the expansion of Rabaul, Madang and Port Moresby is in hand.

### *Surveys Completed*

Boundary Surveys for rural leases were completed during the year in the Morobe, East and West New Britain, Bougainville, Madang, Eastern and Western Highlands, East and West Sepik and New Ireland Districts.

Land tenure conversion surveys were carried out in the Eastern and Western Highlands.

Urban surveys of town allotments were effected in the towns of Madang, Lae, Kieta, Goroka, Maprik, Kainantu and Chimbu.

Trigonometrical control surveys were carried out in the East New Britain, Madang, Eastern Highlands and Morobe Districts.

### *Housing Conditions*

The majority of dwellings in urban areas of Papua New Guinea are of timber frame construction clad with fibrous asbestos cement sheeting and galvanised iron roofing. At present this construction is the most economical from both the materials and construction viewpoint. Some local materials are being used including loom woven sago matting and stabilised earth bricks.

Significant advances have been made in the use of indigenous building materials since the Building Research Centre commenced operations in May 1964. The manufacture of stabilised earth, coronus and cement bricks with simple hand operated machines is now undertaken in 52 centres. Experiments are presently being undertaken aimed at production of burnt clay bricks and present indications are that good durability bricks able to withstand forces of 1,700-1,800 p.s.i. will be within the capability of simple wood fired kilns.

People in rural areas build houses of traditional design from local materials. In recent years permanent manufactured materials have been incorporated with local materials. Houses tend to be constructed as the need arises and frequently as a community effort. As a result there is no housing shortage in these areas.

The drift to the towns that is the experience of all countries undergoing rapid economic development has also occurred in Papua New Guinea. This has caused a rapid increase in urban populations and has led in a number of cases to overcrowding of existing accommodation and to the construction of groups of sub-standard dwellings on the fringes of towns. It is recognised that the problem of shanty settlements that develop in this fashion cannot be controlled by legislation, but can only be overcome by carefully directed housing policies and programmes. To deal with this problem is the responsibility of the Minister of the Interior and in particular the Department of Social Development and Home Affairs and the Housing Commission. The Department is working to upgrade existing shanty settlements where possible while the commission is establishing new minimum cost settlements. The 2 bodies are working together to devise suitable policies and methods and to reinforce each others efforts where necessary.



In considering government action in relation to housing, 3 main groups of the Papua New Guinean people are involved:

- (a) administration personnel employed in both urban and rural areas;
- (b) workers employed more or less permanently in private industry; and
- (c) migrants in urban areas in casual employment, self-employed or unemployed.

The Administering Authority is concerned to meet the needs of all 3 categories, and people from all categories are participating in Administration housing schemes. Private enterprise employers have, and generally accept, only limited responsibilities to provide accommodation for their local employees and many have been unable or reluctant to undertake accommodation programmes involving large capital expenditure. Minimum standards of housing are prescribed in the *Native Employment Ordinance 1958-1967*.

The major objectives of housing policy are to:

- foster the growth of private and self-help housing and home ownership.
- encourage the use of local and traditional building materials and the adoption of housing standards appropriate to Papua New Guinea.
- reduce over-crowding and shanty type housing conditions.

In addition, the Administration operated a housing loans scheme under the *Housing Loans Ordinance 1953-1963*, under which advances may be made to any member of the community for the erection of a house, the purchase or enlargement of an existing house, the completion of a partially erected dwelling, or the discharge of an existing mortgage.

The maximum repayment is 25 years. Minimum cash deposit is 5 per cent of the first \$4,000 plus 10 per cent of the remainder at the Administration valuation. The effective rate of interest is 7½ per cent per annum or 1 per cent above the borrowing rate of funds. Up to 30 June 1970, 514 loans totalling \$2,737,335 had been approved.

A separate scheme established in 1960 under the same ordinance provides low cost houses for rental and eventual sale, preferably to Papua New Guineans. When a tenant's application to purchase a house is approved the principal component of the rent paid during his period of tenancy will be treated as a

deposit on the house which may be purchased by the instalments paid over a period of approximately 30 years.

Finance is also provided to persons under the provisions of the War Service Homes Act of the Commonwealth of Australia.

#### *Housing Commission*

#### 1. *FUNCTIONS AND POWERS OF THE HOUSING COMMISSION*

(i) The Papua New Guinea Housing Commission came into being on 1 July 1968, under the *Housing Commission Ordinance 1967* and inherited 322 houses built during the previous 8 years in Port Moresby, Lae, Madang and Rabaul, under the *Housing Loans Ordinance 1953-1963*.

(ii) *Policy Directive*. The commission operates under a broad policy directive from the Administrator issued on 10 December 1968, following guidelines laid down by the Australian Department of External Territories and after discussions with senior representatives of all departments concerned.

This policy directive states that

(a) The commission's primary and most important task is to establish the conditions under which persons in need of housing will be able to acquire their own houses and which will encourage them to do so.

(b) The commission has a responsibility to improve the design and quality of housing as well as raising the output of housing. To this end the commission's priority tasks should be

(i) to provide sites for the building of dwellings by private persons on conditions of tenure that will make this as easy as possible.

(ii) to make provisions for 'no-covenant' housing areas for Papua New Guineans on which they can erect their own houses. This should be done in collaboration with the Papua New Guinea Government.

(iii) to stimulate and organise the supply of local and traditional material and promote the use of local labour.

(iv) to promote the use of unskilled labour so as to encourage self-help housing and home ownership.

(v) to organise a steady flow of work for Papua New Guinean contractors and local home building industry (e.g. by guaranteeing supplies of building materials for a given period at minimum levels).

(vi) to stimulate the flow of finance for home builders and assist them with plans, equipment and technical advice.

Furthermore the policy directive stipulates that

(c) The commission should operate initially in the main urban areas of Port Moresby, Lae, Madang and Rabaul and should not extend its operations beyond urban areas without approval by the Minister for Interior.

(d) The commission should encourage home ownership by giving emphasis to buildings for sale, while providing rental housing for tenants who would find this more suitable.

(e) The commission should, in the areas where it operates, have responsibility for all Government sponsored housing except institutional and special purpose housing.

(f) The commission may act as the agent for the Papua New Guinea Government or for Government instrumentalities in regard to the housing of expatriate staff. Local officers will be dealt with as part of the public housing programme except where allotted institutional housing.

(g) The commission should devote a large part of its home building programme to minimum cost housing for Papua New Guineans. Applications from local officers for dwellings of lower rental should be accepted even though they are already housed by the Government.

(h) The commission should assist the development of housing for industry in its building construction and land development activities, using specially allocated funds for this purpose.

(iii) *Acquisition of Land.* The acquisition of sufficient land is still the most serious problem facing the commission. Without adequate and suitable land the commission is unable to plan far enough in advance to meet the enormous demand for housing. A stable building industry must depend on a steady and predictable output of houses.

(iv) *Minister responsible for the Housing Commission.* The commission is represented in the House of Assembly by the Minister for the Interior (Department of Social Development and Home Affairs) who issues the Papua New Guinea Government's policy directives on housing.

## 2. LEGISLATION ADMINISTERED BY THE HOUSING COMMISSION

(i) The *Housing Commission Ordinance 1967-72.*

(ii) *Effect of this legislation expanding scope of commission's operations.* The scope of the Housing Commission's operations is very wide and is constantly expanding. Within the framework of its legislation, and as a follow on from the terms of the policy directive laid down by the Administrator, the commission has from time to time updated, modified and expanded the nature and scope of its responsibilities and operations in order to fulfil its growing obligations. Other than the construction of houses and raising the total number of houses built, the commission's most important task has been to establish the conditions under which persons in need of homes can acquire their own houses and live in them, entertain friends and raise families as normal, contented, urban dwellers.

The provision of adequate and suitable urban housing is accepted now as one of the conditions and corner stones of overall national development. Because of this the full scope of a Housing Authority's responsibility may become even wider. It is for this reason the work of housing development in some emerging countries is regarded as inseparable from national development and the 2 functions are combined in one authority with very wide statutory powers.

In Papua New Guinea the Housing Commission is now involved in a great many ancillary operations and responsibilities which are implicit in the Commission's legislation and policies. The following list covers some of the commission's activities and responsibilities, which the commission is now undertaking and successfully carrying out.

(a) The drawing up of improved and simplified designs and types of houses to suit low income tenants.

(b) The acquisition and the provision of sites for home building and for the settlement of whole communities.

(c) The assumption of overall responsibility for urban resettlement and fostering community development in no-covenant areas as a first step towards eliminating squatter proliferation.

(d) Encouraging self-help schemes for those who are really prepared to help themselves.

(e) Organising local Papua New Guinean building contractors to enable them to tender for construction of low cost houses and to ensure a steady flow of work for these contractors.

(f) Guaranteeing supplies of house building materials at minimum cost for labour-only contractors and self-help builders. (This has been done by setting up of a Housing Commission store for timber and for builders hardware at the end of 1971.)

(g) Assisting home builders with plant and equipment at minimum rates.

(h) Stimulating and arranging for finance and loans for home builders.

(i) Encouraging home ownership and sales of rental houses.

(j) Providing medium density housing for rental to Papua New Guinean government officers and their families, whilst undergoing special training under the Government's localisation programme.

(k) Providing houses for rent or sale to married applicants at economic rents.

(l) Providing loans for house-building.

(m) Co-operating with town planners in planning for the needs of complete communities in the areas the commission is developing on a broad-acre basis.

(n) Providing land and buildings for commerce—e.g. shops, office space, markets etc. in new urban housing areas.

(o) Providing land and, in conjunction with Department of Trade and Industry, encouraging the building of factories for light industries close to urban settlements, using specially allocated funds.

(p) Providing land and facilities for social, religious, welfare, sporting and recreation bodies as well as youth clubs.

(q) Encouraging the expansion of public transport to and from places of employment for urban dwellers, especially in new settlements.

### 3. POLICY AND AIMS OF THE COMMISSION

(i) *Provisions of adequate and suitable housing.* The urban people in Papua New Guinea who need housing and whom the Housing Commission aims to assist can be divided into 4 main groups, viz: regular income earners, regular low income earners, casual workers in occasional employment and unemployed.

Government employees in urban areas or small towns on medium incomes, workers employed permanently in private industry on medium incomes and low income earners in both groups make up the 3 wage earning groups that form the majority of those wishing to rent or own commission houses.

The fourth and quickest growing group and by far the largest in overall numbers are migrants from rural to urban areas. Some of these do find occasional employment from time to time, but, in the main, this group is permanently unemployed—a more apt term might be 'non-earners'.

There are no actual figures to indicate how many are in this group, but their number can be gauged from the rapidly growing squatter settlements, some long established, some comparatively new, that are mushrooming on Government and traditionally-owned land in the centre and on the outskirts of all major towns.

(ii) *Construction of low cost houses for rent or sale.* The Housing Commission is concerned to meet the housing needs of all these groups. In the case of regular income earners, the commission, during the current year 1971-72, has completed, or has under construction and nearing completion, 747 low cost houses bearing rentals from \$2.80 to \$8.00 per week. The commission has also, during the same period, given its approval to 68 applications for loans for housebuilding. Commission staff houses and approved applicants at present waiting for houses to rent or another 29 houses to bring the total to 844 houses for 1971-72. In spite of this significant achievement there are still about 2,000 applicants at present waiting for houses to rent or buy in Port Moresby alone.

(iii) *Self-help home builders.* By far the majority of people requiring housing are migrant settlers looking for work or casual workers whose income of \$8 to \$10 a week precludes them from renting any type of commission house at present available. The cheapest low cost house of conventional design and materials which the commission architects have designed would cost \$650 to \$750 to build. The economic rental for this house would be about \$2.00 per week and therefore still beyond the capacity of a married man, earning say \$12 a week, if he is only occasionally employed.

For this large group of migrants who are either occasionally employed or non-earners the commission developed in 1971 a self-help

scheme whereby prospective settlers can get financial and technical assistance from the commission to enable them to erect their own homes in planned and serviced no-covenant areas.

In view of the foregoing it will be seen why the major objectives of housing policy for this group have been as follows:

(a) to reduce the overcrowding in squatter settlements and eliminate shanty-type housing conditions over which there can be little or no control;

(b) to make known as widely as possible the modified building and housing standards which now apply to no-covenant areas and which are more appropriate to Papua New Guinean conditions;

(c) to attract more migrant people, now living in squatter settlements, or living with relatives who already have accommodation, to take up allotments in no-covenant areas;

(d) to foster the growth of individual self-help house building and home ownership either singly or in small ethnic family groups;

(e) to arrange for financial assistance for self-help builders for the purpose of buying building materials.

There has been a small but rapidly growing response to these resettlement schemes. However, compared with the growing number of rural people drifting into towns it seems clear that far bolder and more effective steps will have to be taken to meet this problem before it gets out of hand. There are now an estimated 10,000 to 20,000 migrants in Port Moresby alone.

(iv) *Squatter Problem a National Emergency.* Faced with uncontrolled urban growth the major towns would have to accept the consequent evils of vandalism, vagrancy, prostitution, malnutrition and crime, and the threat to health in the event of a serious outbreak of disease in epidemic proportions. The short term answer would seem to be a massive building programme to provide minimal housing for the greatest number in the shortest possible time. The cost would be great. In broad terms, for every million dollars spent 2,000 houses could be erected in planned subdivisions in a crash operation to be completed in one year, if land were available. Even this would only be touching the surface of the problem.

(v) *Policy on Localisation Within the Commission.* The Housing Commission currently has a staff totalling 153 officers and employees,

of whom 71 per cent are Papua New Guinean officers. Within the administrative, clerical and technical fields, 45 per cent of the responsible positions are held by local officers. (In both Port Moresby and Lae the commission has appointed Papua New Guineans as area managers, and such officers now fill key positions in all aspects of the commission's operations.) The commission's localisation programme has placed emphasis on the sponsoring of local officers through tertiary courses to provide qualified officers in architecture, engineering, drafting, accountancy, administration and law.

This policy will not start to bear fruit until 1974 when the first graduates return to everyday affairs of the commission.

#### 4. ADMINISTRATIVE STRUCTURE AND FINANCE

(i) The commission at present carries out its activities under the direction of a Board of Commissioners, comprising the Commissioner and 4 part-time Associate Commissioners, one of whom is a Papua New Guinean.

The Administrative structure consists of 3 Divisions—Finance and Administration, Property Management, and a Technical Division, each of which is responsible to the Commissioner through the Secretary.

(ii) *Finance.* The Housing Commission obtains its funds generally from 3 sources:

- i. Grants and loans from the Papua New Guinea Government;
- ii. Funds borrowed privately from commercial banking institutions; and
- iii. Receipts from its own sources of internal revenue.

Listed under the above headings these funds for 1971-72 appear as follows:

| (a) <i>Government Grants</i>  |  | \$        |
|---|--|-----------|
| Loan funds to finance house construction projects .. ..                           |  | 1,000,000 |
| Non repayable grants for land development .. ..                                   |  | 650,000   |
| Self-help Housing Grant .. ..   |  | 25,000    |
| Grant for bridging gap between internal revenue and outgoings ..                  |  | 240,000   |
|   |  | 1,699,000 |
| (b) Borrowed from Commonwealth Savings Bank to finance Advance/Loans Scheme .. .. |  | 300,000   |
| (c) Internal Revenue receipts .. ..   |  | 490,000   |
|   |  | 2,489,000 |

For the 1972-1973 year approval is being sought for a building materials grant from the Government of \$60,000, to be administered by the commission to encourage people in planned commission no-covenant and urban resettlement areas to build their own homes. The maximum allocation for eligible applicants will be \$300 per allotment, and will not become available until the applicant has made suitable initial progress from his own resources.

### 5. ACTIVITIES

Some evaluation of previous problems and aspirations of the commission may be found in earlier, Papua New Guinea Annual Reports. The activities of the commission during the period under review are set out below.

#### (i) Public Housing 1971-1972

|   |            |  |  |   |
|---|------------|--|--|---|
| Construction—                           |            |  |  |   |
| Units completed .. .. .                 | 436        |  |  |   |
| Units under construction .. .. .        | 311        |  |  |   |
| <b>Total .. .. .</b>                    | <b>747</b> |  |  |   |
| Staff houses completed .. .. .          |            |  |  |   |
| Under construction .. .. .              | 5          |  |  | 4 |
| Approved Applicants—                    |            |  |  |   |
| Housing completed .. .. .               | 13         |  |  |   |
| Under construction .. .. .              | 7          |  |  |   |
| <b>Total .. .. .</b>                    | <b>29</b>  |  |  |   |
| Loans applicants—                       |            |  |  |   |
| Housing completed .. .. .               | 9          |  |  |   |
| Under construction .. .. .              | 59         |  |  |   |
| <b>Total .. .. .</b>                    | <b>68</b>  |  |  |   |
| <b>Total completed .. .. .</b>          | <b>463</b> |  |  |   |
| <b>Total under construction .. .. .</b> | <b>381</b> |  |  |   |
| <b>Combined total .. .. .</b>           | <b>844</b> |  |  |   |

#### (ii) Applications for Rented Houses

|                             | 1971-1972 | 1968-1972 |
|-----------------------------|-----------|-----------|
| Total applications received | 839       | 5,521     |
| Total applicants housed ..  | 474       | 1,567     |

#### (iii) Application for Housing Loans

|                        | 1971-1972 | 1968-1972 |
|------------------------|-----------|-----------|
| Total received .. .. . | 65        | ..        |
| Total approved .. .. . | 64        | 208       |

#### (iv) Advances Scheme

|   | 1971-1972 | 1968-1972   |
|---|-----------|-------------|
| Value of advances to eligible persons to enable them to become home owners .. | \$300,755 | \$1,178,855 |

(v) *Urban Centres of Activity.* The Housing Commission in accordance with its policy directive, is at present operating in the main urban areas of Port Moresby, Lae, Madang and Rabaul, where, excluding Rabaul, it has permanent area offices. In the last financial year the commission extended its activities to

5 new urban centres viz: Kimbe, Goroka, Mt Hagen, Bulolo, and Alotau where it works through agencies such as local government councils or Government departments.

#### (vi) Urban Resettlement in No-Covenant 'Self-Help' Areas

*Port Moresby.* In the two resettlement areas in Port Moresby 500 no-covenant allotments have now been made available for allocation to self-help builders. Prior to this, land development work had been carried out in the way of roads, storm-water drainage and piped water points. In these 2 areas 198 tenants have, up to 30 June 1972, been allocated blocks, and of these 64 have built either temporary or permanent structures on their allotments.

Over and above these residential allotments, special purpose allotments have been set aside for primary schools, churches, child welfare centres, play areas for children, recreation clubs and a sports ground. Provision has also been made for commercial allotments, shop sites, etc.

*Lae.* In the Lae urban area 134 no-covenant blocks have been surveyed and made available on land taken over by the Housing Commission from the Department of Agriculture, and, since 30 June 1972, 120 of these have been allocated to eligible settlers.

## CHAPTER 12

### PROSTITUTION

No special legislative or administrative measures have been found necessary in respect of prostitution or brothel-keeping.

The Papua New Guinea Department of Public Health is closely watching the role of prostitution in the spread of venereal diseases and is taking measures for effective control.

## CHAPTER 13

### PENAL ORGANISATION

#### Legislation

*The Corrective Institutions Ordinance 1957-1969* provides for the administration of corrective institutions and for the education and trade training of persons under detention.

#### Ministerial Responsibility

The Minister of the Interior is now responsible for the corrective institutions service and for the Department of Social Development and Home Affairs.

Although the Administering Authority retained responsibility for the Department of Law during the period under review, it is planned to transfer powers to the Papua New Guinea Government as soon as difficult administrative machinery is dealt with.

The Assistant Ministerial Member responsible for the Corrective Institutions Branch in the Second House of Assembly was Mr Meck Singiliong, MHA. The Minister for Interior in the Third House of Assembly is Dr John Guise, CBE MHA.

#### *Administrative Organisation*

The Commissioner of Corrective Institutions whose service is situated within the Department of Law, is responsible for the management of all institutions, and all detainees are deemed to be in his custody. The Corrective Institutions Service falls within the Ministry of the Interior.

At 30 June 1972 there were 89 institutions in Papua New Guinea with a staff of 107 officers and 75 from the Division of District Administration, acting in an agency capacity; and 91 female and 1,820 male Assistant Correctional Officers.

#### *Development of Institutions*

Institutions are divided into 4 categories:

- Grade 1—minor area institutions
- Grade 2—major area institutions
- Grade 3—central institutions
- Grade 4—major central institutions

The major central institutions in Papua New Guinea are:

- Baisu (near Mount Hagen)
- Bomana (near Port Moresby)

The central institutions in Papua New Guinea are:

- Boram (near Wewak)
- Buimo (near Lac)
- Keravat (near Rabaul)
- Daru

The major area institutions in Papua New Guinea are:

- Beon (near Madang)
- Bihute (near Goroka)
- Barane (near Kundiawa)
- Bandiara (near Kainantu)
- Kavieng
- Bui-Iebi (near Mendi)
- Biru (near Popondetta)

There are also 76 minor area institutions in Papua New Guinea at various suitable locations.

To make full use of the facilities of larger institutions, and to assist administration, small institutions are closed wherever their inmates can be accommodated more adequately at larger centres.

The central corrective institutions are situated in rural surroundings with provision for training in farming and forestry work, and for outdoor recreation.

In all institutions detainee labour is employed as much as possible in institution building programmes, and local materials and components processed in the institutions, including bricks, tanks and other plumbing items, timber and welded metal work, are used as far as possible. Land has been set aside as necessary for district and subsidiary institutions, and further land is being investigated as improved or new sites.

*Staffing.* The policy is to staff all central and district institutions with trained personnel of the Corrective Institutions Service. Correctional Officers are stationed at all central institutions. Assistant Correctional Officers are available for all central and major area institutions. The majority of minor area corrective institutions are now staffed by Assistant Correctional Officers thus relieving the Royal Papua New Guinea Constabulary of institutional duties, and this provision of relief is being accelerated where possible.

All Correctional Officers and Assistant Correctional Officers are given special training for a period of 5 months at the Bomana Major Central Institution near Port Moresby, in institution management, care of detainees, training, correction and rehabilitation. Officers selected for service in Papua New Guinea are given a further 6 months' training by trained and experienced senior officers in major central institutions. As far as practicable, Assistant Correctional Officers receive a further 6 months' training at major central institutions in Papua New Guinea before being posted to other institutions there.

The initial training at Bomana gives officers and Assistant Correctional Officers a uniform approach to the treatment, correction and rehabilitation of detainees under well established conditions. The further period of 6 months' training at major central institutions in Papua New Guinea introduces some diversity in relation to agricultural methods, building and construction projects, language and

culture, and permits more individual instruction to be given.

A staff training centre is still under construction near the Bomana Major Central Institution and the training period for Assistant Correctional Officers and officers has been increased to 6 months. A special squad of Officers and Assistant Correctional Officers as instructors are available for the Staff Training Centre.

Fourteen Papua New Guinean Officer Cadets are in training and are given the opportunity to attend courses in building and mechanical trades, forestry, animal husbandry, health and hygiene, basic psychology, and drill instruction.

Five young Papua New Guineans graduated from Officer Cadetships as Assistant Superintendents (now Correctional Officers Grade 1) during 1970-71 and a further 6 graduated during 1971-72. Further graduation for 5 during 1972-73 is expected.

#### *Classification of Detainees*

Detainees are committed to the institution nearest the place where sentence was imposed, but those serving a long-term sentence may be transferred to a major central or central institution for more effective supervision, training and specialist medical treatment. Those long-term detainees who do not constitute a security problem and who have developed special skills may be transferred to major and minor area institutions to provide valuable skilled labour at those points. Detainees may also be transferred before release to the institution nearest to their homes to help them to re-establish their family relationships and assist them in their rehabilitation. Under the *Removal of Prisoners (Territories) Act 1923-1968* Europeans sentenced to imprisonment for a term of more than 6 months may be transferred to a prison in Australia where discharge on completion of their sentence is also arranged if their return to Papua New Guinea is not proposed.

On their admission to an institution, detainees are classified as follows:

**First Class**—detainees held solely as witnesses, awaiting trial, remanded in custody or under investigation, or who have appealed against their conviction.

**Second Class**—detainees imprisoned for failure to comply with an order made under a law of Papua New Guinea relating to maintenance or affiliation orders;

and those who have appealed against sentence, until such time as the appeal is determined.

**Third Class**—detainees, other than those of the first and second classes, who have not been previously imprisoned in Papua New Guinea or elsewhere; or in the opinion of the commissioner are likely to co-operate in and benefit from training.

**Fourth Class**—detainees, other than those of the first, second and third classes, who have been previously imprisoned in Papua New Guinea or elsewhere; or who in the opinion of the commissioner should not be associated with detainees of any other class.

In addition, detainees in respect of whom any investigation is proceeding to determine their classification may be placed in a fifth class.

As far as practicable, detainees of one class are kept separate from those of any other class. The commissioner may order the transfer of detainees from one class to another and the separation of juveniles or recidivists within a class. Separate quarters beyond the walls of the main compound of each institution are provided for the exclusive use of female detainees.

Details of the terms of sentence and numbers of persons under sentence are set out in Appendix XXI of this Report.

#### *Conditions of Labour in Institutions*

Penalties which may be imposed under the laws of Papua New Guinea include imprisonment with or without hard labour. Detainees sentenced to imprisonment with hard labour are employed on Government undertakings as the commissioner directs.

Except as specially provided in the regulations, hours of work may not exceed 8½ hours a day, and there is no work on Saturday afternoon or on Sunday.

Religious beliefs precluding working on Saturdays are respected and appropriate adjustments made.

Detainees may be employed both inside and outside an institution; most work outside where they receive, as far as possible, practical training in agriculture, animal husbandry, forestry, plant operation and a number of trades. Technical training is kept at a level

consistent with the economic resources of village communities; for instance, simple brick-making machines use coral and gravel as raw materials.

Detainees of the first and second classes may be required to keep an institution in a clean and sanitary condition. Female prisoners are employed in such tasks as sewing, washing and weeding.

Payment at the rate of 20 cents a week for the full period of sentence is made to detainees serving a sentence of 24 months or over to assist in their rehabilitation on release.

#### *General Conditions in Institutions*

*Welfare.* All detainees are medically examined on admission, transfer and discharge, and are regularly seen by visiting medical officers. When adequate treatment cannot be given in an institution, sick persons are removed to a hospital for specialist treatment. Provision is also made for the treatment of psychiatric cases and for the criminally insane.

Visiting medical officers inspect institutions, buildings and services, examine clothing, bedding and food and may order bedding or clothes additional to those items specified in the regulations. The number of blankets and woollen garments issued varies according to the height of the institution above sea-level. Mass X-ray examinations of long-term detainees, Assistant Correctional Officers and their dependants are carried out.

Detainees are housed either in wards or in cells which have an average of over 370 cu ft of air space per person, cells and wards are provided separately for Papua New Guineans and expatriates, and males and females.

Under the ordinance, provision is made for the appointment of chaplains and for religious services.

*Visiting Justices.* A magistrate or visiting justice is appointed by the Administrator to each institution and is required to visit the particular institution for which he is responsible at least once a month.

Judges of the Supreme Court are also ex-officio visiting justices. A visiting justice is obliged and empowered to inquire into the conduct of staff and into any abuse or irregularity within the institution; he must interview in private any detainee who requests an interview and as far as possible, all others; and he must report to the Administrator on his findings.

*Discipline.* Visiting justices try breaches of discipline and may impose a penalty of imprisonment for a term not exceeding one month in addition to the term being served by the detainee at the time of the offence. Offences aggravated by repetition or otherwise are tried by a magistrate who may impose a sentence not exceeding 6 months. Such a sentence is cumulative with any sentence the prisoner is serving at the time. Witnesses called are sworn or affirmed in the manner usual in courts of justice.

#### *Remissions of Sentence*

Male detainees serving a sentence of more than 3 months are eligible for a remission of 8 days a month while females serving a sentence of more than 1 month are eligible for a remission of 10 days a month. Detainees serving a life sentence have their sentences reviewed at the end of 12 years from the time the life sentence was imposed. Another review is made 3 years later when the detainee may be released.

#### *Release on Licence*

The Criminal Code of Papua and the Criminal Code of New Guinea each provides for the release of detainees on licence granted by the Administrator for any remaining portion of the sentence being served at the time of granting. Such a licence may be made subject to such conditions as may be included in that licence; conditions of the licence may be varied or revoked by the Administrator, who may also revoke the licence should he deem this necessary. Upon revocation the licensee may be again taken into custody for the purpose of undergoing and serving a period of sentence equal to the part of his original sentence not served at the time of his release on licence. Revocation of licence is subject to appeal to the Supreme Court.

#### *Training, Amenities and Rehabilitation*

Training is given in technical trades such as motor maintenance, plumbing and tin-smithing, carpentry, brick making, brick laying building and sawmilling; in the operation of heavy equipment; and in agriculture animal husbandry, fishery and forestry. At Bomana, Buimo, Keravat, Baisu and Boram, detainees undertake project training in building construction and allied trades, and instruction and practical experience in brick making are provided at a number of other institutions including Baisu, Boram, Kavieng, Bihute and



Beon. Special funds are provided to buy equipment and training materials, and close liaison is maintained with the Departments of Agriculture, Stock and Fisheries; Public Works; Forestry; and Education. Training records are maintained for long-term detainees. Adult education classes have been conducted at all central institutions except Baisu and at some district institutions for some years through the Department of Education which also supplies the teachers and necessary books and materials.

Recreation includes football, cricket, basketball, baseball and handcrafts. Detainees may buy or be given books, magazines, religious literature and additional stationery and toilet items. They may also correspond with relatives and friends at frequent intervals. The supply of films and suitable library books for the main institutions is arranged through the Department of Information and Extension Services and by public donation.

On discharge Papua New Guinean detainees usually return to their villages where they are

rehabilitated to community life. Sustenance is provided for the journey, and land sea or air transport is provided free if the discharged person elects to return to his village within 7 days of his release.

Both the Corrective Institutions Service and the Department of Social Development and Home Affairs assist in finding employment for discharged persons. The Department of Social Development and Home Affairs investigates any problems discharged persons may have, arranges continued medical treatment, if this should be necessary and provides general aftercare and assistance.

On 5 June 1972 the Minister responsible for the Corrective Institutions Service pointed to the emergence of the Corrective Service as a vital aspect of the social development of the Papua New Guinea community and promised that emphasis on the rehabilitation of detainees will grow in the future to enable them to more effectively resume village or community life as productive and safe members of the community.

## PART VIII. EDUCATIONAL ADVANCEMENT

### CHAPTER 1

#### THE EDUCATION SYSTEM

##### *The Role of Education*

The role of the education system in Papua New Guinea is, in broad terms, to educate for social, political and economic change. By this we mean educating students so that they can successfully adapt to the rapid social and political changes taking place in the country and in the case of mature age students educating them so that they will be able to assist in initiating development-oriented social change. The system is also concerned with educating students so that they make a positive contribution to the economic development of the country. An understanding and appreciation of traditional Papua New Guinea culture and the growth of a national cultural identity is subsumed in the social change objective.

##### *Ministerial Responsibility*

During the year under review the Papua New Guinea Ministry exercised full authority and final responsibility in relation to all aspects

of primary and secondary education and the administration and operation of Government Teachers' Colleges excluding Goroka Teachers' College. These responsibilities involved control over syllabi, fees and charges, maintenance and transport for students, grants-in-aid to mission schools and the school-commencing age. The Papua New Guinea Ministry also exercised full authority and final responsibility in relation to the allocation of scholarships to tertiary educational institutions, education research and teaching methods, and in relation to the Education Board, the Papua New Guinea Public Museum and the Art Gallery. There is quite a number of post-secondary training institutions attached to various Government departments and under the responsibility of particular Papua New Guinea Ministers.

The Administering Authority retained policy responsibility for tertiary education, Goroka Teachers' College, and for the Teaching Service Commission. Education at the 2 autonomous tertiary institutions (the University of Papua New Guinea and the Institute of Technology) is the responsibility of their own

councils, which operate within policy guidelines determined by the Australian Government acting on the advice of the Administrator's Executive Council.

In the Second House of Assembly the Ministerial Member for Education was Mr Matthias ToLiman, MHA. In the Third House of Assembly the Minister for Education is Mr Ebia Olewale, MHA. Pre-primary education was the responsibility of the Ministerial Member for Public Health in the Second House of Assembly, Mr Tore Lokoloko, MHA. His successor, the Minister for Health in the Third House of Assembly, is Dr Reuben Taureka, MHA.

#### Legislation

The *Education (Papua New Guinea) Ordinance 1970* provided for the establishment of a National Education System which includes Administration schools and schools nominated by other education agencies meeting certain prescribed conditions.

The ordinance provided for a decentralised system, with community and special interest involvement in decision making.

The *Teaching Service Ordinance 1971* established a Teaching Service Commission as the employing authority for teachers in the National Education System.

The *University of Papua New Guinea Ordinance 1965* and the *Institute of Technology Ordinance 1965* provided the basis for the establishment and operation of these 2 institutions.

#### General Policy

The basic philosophy of education outlined in previous Annual Reports remains unchanged. The objectives and purposes of the National Education System as stated in the *Education Ordinance 1970* are:

(a) to develop and encourage the development of a system of education fitted to the requirements of Papua New Guinea and its people;

(b) to establish, preserve and improve standards of education throughout the country;

(c) to make the benefits of such education available as widely as possible, in so far as this can be done by legislative and administrative measures, and in such a way to foster, among other things, a sense of common purpose and nationhood and a sense of the importance and value of education at all its various levels.

The Education Ordinance recognises the right of parents to obtain the education which they wish for their children and the desirability of reasonable diversity of educational methods provided that standards of educational achievement are not sacrificed. Schools or colleges within the National Education System are not entitled to exclude children because of religious or doctrinal affiliations. Similarly no child in a school or college within the system need attend any religious or doctrinal instruction contrary to the expressed wishes of his/her parents.

For many years there was a high instance of student wastage in primary schools. In an effort to substantially reduce wastage levels membership of the National Education System is restricted to those primary schools which undertake to provide 4th year places for at least 75 per cent and 6th year places for at least 60 per cent of the number of pupils enrolled in their first school (i.e. Class 1) year at the particular school.

In recent years parents have been asked to make a direct contribution to the cost of their children's education where they are in the position to do so. Parents pay a school equipment charge of \$1 for each primary student and \$3 for each secondary and technical student. In secondary and technical boarding institutions parents contribute an average \$30 towards the cost of feeding students (the actual cost of feeding a student is about \$75 but this varies from area to area).

Educational opportunity varies widely. In general, people from the Highlands region and rural areas, and females are relatively disadvantaged in terms of educational opportunities. Current policy is aimed at reducing the inequality of opportunity as far as this is possible within the scope of limited resources and without actually reducing the student places available in relatively advantaged districts and areas.

At present about 35 per cent of Papua New Guinea children aged 7 to 12, attend primary school (this being the theoretical school age). There is also a significant but decreasing number of children aged 13 and above attending primary school. High school places are available for about 10 per cent of secondary school aged children. About half of the students completing a primary education proceed to either secondary education (immediately) or vocational training (usually after a year or two). A recent development designed to provide opportunities for further education

for children completing a primary course but not selected for secondary or vocational training will begin in 1973 with the addition of secondary school topics at selected primary schools. Such schools will provide a 2-year course of secondary education which whilst similar to the standard secondary school course will concentrate especially on practical and outdoor activities.

#### *Administration*

The Department of Education is responsible for administering the National Education System. The Department has 6 functional divisions (Primary Education, Secondary Education, Technical Education, Teacher Education, Education Services and Management Services). The Director of Education's representative in each district is the District Superintendent. The District Superintendent is the Chairman of the District Education Board which includes community, mission, local government and teacher association representation and whose responsibilities include allocating staff to primary schools and the over-sighting and planning of educational development within the district.

The District Education Boards are ultimately responsible to a National Education Board chaired by the Director of Education and with widely representative membership. The National Education Board may make recommendations to the Minister for Education on any educational issue but its real role is that of a planning body whose functions include deciding on new teacher allocations to districts and staff appointments to teachers' and technical colleges, as well as recommending priorities in planning after weighing-up policy, curriculum, administrative and expenditure considerations.

Education agencies are responsible for the establishment, maintenance and conduct of agency schools and colleges within the education system and within such guidelines that are laid down by District Education Boards and the National Education Board. The Department of Education is the agency for Government schools as well as being the executive arm of the National Education System.

A Teaching Service Commission consisting of a Commissioner and (at present) one Associate Commissioner is responsible for determining service conditions for teachers.

Each primary and vocational school has a Board of Management responsible for planning for the development of the school

including student enrolments, classroom buildings and teacher housing. Boards of management are representative of the community that they serve. Secondary and technical schools and technical and teachers' colleges have a large degree of internal autonomy and are administered by governing bodies known as Boards of Governors (schools) and Governing Councils (colleges). These governing bodies include representatives from teachers and students of the school concerned, local government councils, the District Education Board, the Headmaster or Principal and general community representatives. Some Governing Councils also include a National Education Board and a tertiary education representative as well as representation from graduates of the college.

## CHAPTER 2

### PRIMARY EDUCATION

#### *Policy*

The long term goal is the attainment of universal primary education. In the foreseeable future however the objective is to provide greater opportunities for those areas and groups of people at present relatively disadvantaged in terms of educational opportunity. Since about half of the students completing a 6-year primary education do not receive further formal education the primary course is designed to be complete in itself. The objective is to turn out students possessing literacy and numeracy skills that they will retain, an understanding and appreciation of traditional Papua New Guinea culture and realistic aspirations.

#### *Curriculum Development*

There are 3 types of primary schools. Papua New Guinea curriculum schools follow a syllabus designed to meet the needs of Papua New Guinean children; Australian curriculum schools follow an Australian (New South Wales) syllabus and cater mainly for expatriate children; dual curriculum schools provide both types of curriculum within the one school. In dual curriculum schools there are many activities which are being used successfully to bring students from the different streams together. These include the school assembly, community activities, choral activities, excursions, lessons in social studies, expressive arts and physical education.

The Papua New Guinea curriculum was scrutinised by a widely representative group of Papua New Guineans at a curriculum seminar held in late 1971. Participants were asked to express their views on the relevance of the objectives and content of the existing curriculum. Members of the seminar indicated that the primary curriculum is not in need of change in the core subject areas. However they indicated that it should also include activities which would assist children in discovering their own values and cultures as well as relevant activities for the large group of people who would terminate their formal education at the end of the primary course. For this reason more attention is now being given to community activities, indigenous languages, agriculture and special activities for girls (including needlecraft).

*English.* The Papua New Guinea curriculum concentrates on the early development of oral facilities in English, the acquisition of which will enable literacy in English to be more readily achieved at a later stage. The present English syllabus follows a series of carefully graded steps and includes a balanced programme in reading, writing, listening and speaking. The objective of the English syllabus is to impart a level of literacy in English that will be retained by the student even if he doesn't proceed to further formal education. (In some schools vernacular languages are being studied as part of a programme of Papua New Guinean cultural studies.)

*Mathematics.* A programme in modern mathematics is being developed in the light of continuing research in the cognitive development of Papua New Guinean children. Reference is being made to the latest techniques of mathematical learning being developed overseas. A number of in-service courses have been held for teachers, and curriculum advisers in each district are active in assisting teachers to overcome any problems that they may have in implementing the new syllabus which is being introduced progressively through the primary grades.

*Science.* Primary schools now follow a special Three Phase Primary Science (TPPS) Course which has been introduced over the past several years. The course was developed with the assistance of UNICEF and UNESCO.

Phase 1 consists of a series of activity lessons designed to provide experiences leading to the development of basic science concepts.

Phase 2 consists of a series of simple observation type experiments designed for completion by small groups or individual children. Phase 3 consists of more formal experiments and activities involving observation, measurement and recording designed to lead to the formulation of basic scientific concepts.

*Social Studies.* The social studies course is in the process of being revised to make it more relevant to the Papua New Guinea situation. Curriculum seminars have been held with teachers to find out exactly what is needed in a primary social studies course. Work has been done in providing materials for a newly modified course which is expected to operate from 1973.

*Christian Education.* A syllabus in Christian Education has been approved by the major churches for use in primary schools. Objectives of the syllabus are to give students an appreciation of Christianity and general Christian values without being doctrinal. The course takes into account the traditional cultural background of Papua New Guinea.

*Agriculture.* An agriculture course is being piloted in selected schools in 1972 and it is anticipated that it will be introduced on a wide scale in 1973.

In addition to the above subject fields there are new developments in the fields of community activities, expressive arts and cultural studies.

### Enrolments

#### NATIONAL EDUCATION SYSTEM

|  | Papua<br>New<br>Guinea<br>curriculum | Other<br>curricula | Total |
|--|--------------------------------------|--------------------|-------|
|--|--------------------------------------|--------------------|-------|

#### (i) Numbers of Primary Schools at 30 June 1972

|                      |       |    |       |
|----------------------|-------|----|-------|
| Government Agency .. | 499   | 55 | 554   |
| Other agencies       | 984   | 9  | 993   |
| Total ..             | 1,483 | 64 | 1,547 |

#### (ii) Primary School Enrolments at 30 June 1972

|                      |         |        |         |
|----------------------|---------|--------|---------|
| Government Agency .. | 79,740  | 11,015 | 90,755  |
| Other agencies       | 128,495 | 943    | 129,438 |
| Total ..             | 208,235 | 11,958 | 220,193 |

## CHAPTER 3 SECONDARY EDUCATION

### *Policy*

The long term goal is to make secondary education available to those with sufficient ability to make adequate use of it. More immediate objectives include increasing community involvement in the educational process, emphasising the role of Regional Secondary Inspectors as professional leaders, subjecting the curriculum to constant surveillance and modification where necessary, and improving communications between the department, education agencies, schools, staff and students. A further objective is to increase the rate of professional development of all staff.

Community involvement is seen as a 2-way process. Not only is the community involved more and more in the operation of the school but the students themselves play an active role in the decision making processes of the schools (through the Students Representative Council and membership on the Board of Governors) and also in community projects.

The object of increasing the professional development of teachers is being met by a series of in-service courses and workshops in various subject areas. An intensive course for agriculture teachers is planned for November 1972 and selected manual arts teachers have been invited to attend a full year's course in 1973 to improve their qualifications and update their teaching techniques. Papua New Guinean secondary teachers are now included in Executive Assessment workshops (see chapter on *Teacher Education*).

The number of Regional Secondary Inspectors has been increased so that they now have the opportunity to emphasise their roles as advisers and spend more time at each school.

Under the direction of UNESCO field advisers, courses have recently been held for both library and laboratory assistants. This has enabled almost 50 trained personnel to be attached to schools and assist in the development and efficient operation of libraries and laboratories. These assistants are employed by the Board of Governors at the particular school concerned.

The decision by the Minister for Education to introduce a new 2-year secondary course for students completing a primary education but not selected for secondary or vocational schools should enable an additional 500-600

students to attend Form 1 in 1973. The total enrolment in such schools should be more than 1,200 in 1974. Form 2 will be the terminal year for these students.

Another development during 1972 has been the introduction of project accounting in 12 secondary schools (including the 2 senior high schools). This system allows greater flexibility for the school to employ ancillary staff and provide the facilities and equipment most appropriate to their individual needs.

### *Curriculum Development*

The secondary course consists of 2 stages of 2 years. In Stage I (Forms 1 and 2) all students study English, mathematics, science, social science, rural science and business principles, expressive arts, religion, health, guidance and manual arts or home economics. Stage II (Forms 3 and 4) provides for a choice of subject field. The 2 stages are self contained. About 40 per cent of students leave school at the end of their Form 2 year and a number of these students find places in technical colleges. About 25 per cent of students completing Form 4 will proceed either to Form 5 at one of the senior high schools or to the University (preliminary year) or the Institute of Technology (introductory year).

There has been no change in the general curricula for Stages I and II in 1972. The curricula for the senior high schools are under active surveillance so that the needs of the community are met.

In individual subject areas the greatest activity has been in science where the Department of Education in liaison with United Nations advisers is developing a new secondary science syllabus complete with accompanying materials. The new syllabus is currently being tested in 6 pilot schools.

Stage I of the social science course is now in full operation whilst Stage II is being trialled in selected schools. Other syllabus developments include the revision of English Stage I, manual arts Stage II, guidance and history. The new religious studies syllabus and associated materials are at an advanced stage and will be piloted in 6 schools in 1973.

### *Examinations*

Current policy is to de-emphasise external examinations. It is anticipated, however, that external testing will continue for certain core subjects at Form 4 or School Certificate level. Emphasis on internal teacher assessment

remains high and with a view to increasing the quality of assessment procedures in-service training workshops on internal assessment have been introduced for secondary teachers. Even in areas where external examinations are held considerable reliance is placed on teacher assessment of student performance.

#### Enrolments

In 1972 3 new Government high schools were opened, viz. Kokopo in East New Britain, Arawa in Bougainville and Gordons in the Central District. (Arawa and Gordons are dual curriculum schools.) Three new Government high schools will open in 1973 at Kainantu in the Eastern Highlands, Chuave in the Chimbu District and Wabag in the Western Highlands. No new church agency schools opened in 1972 or are expected to open in 1973. The country's second senior high school is in operation at Kerevat (East New Britain) with a Form 5 group in 1972. A Form 6 will be added in 1973.

#### NATIONAL EDUCATION SYSTEM

|  | Papua<br>New<br>Guinea<br>curriculum | Other<br>curricula | Total |
|--|--------------------------------------|--------------------|-------|
|--|--------------------------------------|--------------------|-------|

##### (i) Numbers of Secondary Schools at 30 June 1972

|                      |    |    |    |
|----------------------|----|----|----|
| Government Agency .. | 31 | 5  | 36 |
| Other agencies       | 31 | .. | 31 |
| Total ..             | 62 | 5  | 67 |

##### (ii) Secondary School Enrolments at 30 June 1972

|                      |        |       |        |
|----------------------|--------|-------|--------|
| Government Agency .. | 12,334 | 1,474 | 13,808 |
| Other agencies       | 9,715  | ..    | 9,715  |
| Total ..             | 22,049 | 1,474 | 23,523 |

## CHAPTER 4

### TECHNICAL EDUCATION

#### Types of Training

Technical education and training is provided at Technical Colleges, Technical Schools, Secretarial Schools and Vocational Training Centres.

(i) *Full-Time Technical Courses.* These courses are offered to students who have successfully completed Form 2 at a high

school and wish to enter the technical stream. The next 2 years of study are taken at a technical school/college and the students continue with their general education leading to the Form 4 School Certificate. However, in addition students pursue technical training in a chosen field. Two years of technical training reduces by one year the duration of an apprenticeship. After completing these studies, students may be indentured to an employer and continue their apprenticeship training through block release training courses, supplemented by evening or correspondence lessons. At the completion of the School Certificate students may compete for entry to a tertiary institution.

(ii) *Block Release (Apprenticeship).* Block release courses provide for apprentices to attend a technical school/college for from five to ten weeks of training during each year of the apprenticeship. This training supplements the on the job experience of the apprentice. These courses provide training for most trade categories including clerical. These courses are available for students in the following categories:

(a) Those who have passed Form 2 at high school and then take up employment. These students may then be indentured and do all stages of their apprenticeship training through the block course system;

(b) Those students who take up employment after finishing Form 3 at a technical school/college. Such students have completed Stage 1 of apprentice training and will complete the remaining stages through the block course system; and

(c) Those students who have completed Form 4 at a technical school/college. Such students have completed Stages 1 and 2 of apprentice training and will complete the remaining stage or stages through the block course system. Apprenticeships are for a 4 year or 3 year period, depending on the type of trade undertaken.

(iii) *Certificate Courses.* These are sub-professional (middle level) courses and may be undertaken after an apprentice has successfully completed his trade training. They may also be undertaken by School Certificate holders, whether from secondary or technical schools. Previously engineering and commerce courses were held in Lae

Technical College, and to these can now be added the building certificate course which commenced at Port Moresby Technical College in 1971.

The engineering course is conducted over four stages, one stage of twelve weeks taken per year. The commerce course consists of three stages, one stage of twenty weeks taken per year. Stages 1 and 2 of the building certificate course are conducted on a part time evening basis in Port Moresby. Also Stage 1 block courses, of twelve weeks are conducted at Port Moresby Technical College.

(iv) *Practical Training for School Leavers.* The aim of the scheme is to provide training at basic level to school leavers who have at least a Standard 6 education, but who are not eligible for apprenticeship training. Practical skills are taught in a chosen field so that the participants have a better opportunity of gaining employment, or are able to use their skills in their village environment. Courses are intensive, being of 18 or 36 weeks, duration and for 12 hours each week. The training does not cut across normal school activities, as sessions are held in the late afternoons, evenings and Saturday mornings. Subjects are offered at all technical schools and colleges, and are limited only by the facilities at these centres and finance to pay part-time staff. Courses available are basic building, motor maintenance, motor body repair, basic welding, block making and laying, basic painting, tank making and roof plumbing, cooking and catering. A total 238 students are attending these courses in 1972.

(v) *Commercial Training.* Training is available at centres in Port Moresby, Lae and Rabaul for girls who wish to become typists and secretaries. Entry level to these 1 and 2 year courses is successful completion of Form 2 high school. Subjects include typing, commercial English, business studies, commercial mathematics, shorthand, audio typing, and deportment. Girls who have completed these courses are in great demand, and efforts are being made to attract more girls into this type of training. Additional courses are also being developed for the increasing number of girls at Form 3 and Form 4 level who wish to undertake secretarial training.

(vi) *Vocational Centres.* These Centres have been developed to provide full time

basic practical training for students who have completed primary school. Most of these centres are set up in rural areas and are geared to the needs of the local community. Instruction offered includes agriculture, basic building skills, motor and vehicle maintenance, fishing, furniture making, driving, and trade store management. There are also vocational training courses for girls, and these are aimed at teaching skills to assist in elevating living standards, as well as to gain paid employment. In urban areas there is a more pressing need to earn money, and greater emphasis is now being placed on acquiring basic occupational skills which could lead to employment in a variety of fields including assisting in retail stores, factories, child minding centres, hotels, motels and the tourist industry. Vocational centres have also conducted a number of part-time courses during the year. These include outboard motor maintenance, vehicle maintenance and driving classes.

#### *Auxiliary Bodies*

*Boards of Studies.* The certificate courses mentioned above need recognition in Government and private enterprise spheres as a pre-requisite for certain promotional opportunities. To give these courses status, Boards of Studies are being set up. These consist of representative bodies of highly qualified persons associated with industry and commerce and strongly interested in their particular field.

The Board of Commercial Studies was set up during 1970 and has now clearly defined its subjects for a Commercial Certificate Course. The Board has granted exemptions for certain forms of training, and Stage 1, Stage 2 and 3 examinations will be held in 1972.

A Board of Building Studies has also been formed and its inaugural meeting was held in March 1971. The Board works in close relation with the Department of Education to develop the Building Certificate Course, geared to the specific needs of industry in Papua New Guinea.

Boards of Civil Engineering Studies and Hotel and Catering Studies have been formed in 1972. Boards of studies for mechanical engineering, commerce and building were established in previous years.

*Trade Advisory Panels.* These panels consist of representatives from the Department of Education, private enterprise, statutory authorities and the Apprenticeship Board. There is

a panel to represent each apprenticeable trade. Such panels meet at least once a year to advise on trade standards, and review syllabi and methods of assessment. A determined effort is made to ensure full involvement of the trade panels in this curriculum work.

*United Nations Development Programme.* Under this Programme overseas experts have been assisting in the field of vocational and Industrial Training (UNDP/PA). This project is the preliminary phase to the Special Fund Project—National Vocational and Industrial Training Programme. Operations started with the assignment of a high level manpower analyst, who undertook an overall analysis of Papua New Guinea manpower resources and requirements. An expert in apprenticeship and building trades, and an expert in vocational training needs, took up duty in February 1971 and completed their assignments in December 1971. Negotiations are now underway for the commencement of the Special Fund Project.

#### *Staffing*

*Instructors' Workshop.* In May 1971 a vocational instructors' workshop was conducted at Port Moresby by the Technical Division. A group of 25 instructors participated. The group comprised 21 expatriate and 4 local officers. This course proved very successful in achieving its aims, and a similar workshop will now be held in Goroka during July 1973.

*Technical Teacher Training.* A one-year technical teacher training course is planned to commence in 1973 at Goroka Teachers College. The course aims to train skilled tradesmen to become teachers in technical schools and colleges. Tradesmen who successfully complete the course will receive a diploma in teaching.

*Recruitment.* 1972 has seen a further improvement in the range and quality of specialist teachers recruited from Australia. However, despite the Technical Division's priority within the Department of Education in the allocation of new overseas recruits, the present establishment is inadequate to staff the expanding technical institutions, particularly vocational centres.

There were, in 1972, 10 overseas volunteers teaching in technical institutions.

The recruitment of local staff poses a very difficult problem. With the exception of artisans' assistants (virtually tradesmen's assistants), who are eligible for reclassification to Instructor after 10 years' experience, the division lacks Papua New Guinean tradesmen who have elected to pursue teaching careers.

A basic reason for this problem in the tradesman/instructor training programme is the relatively low salaries offered to instructors in the teaching service, compared to wages paid by private employers to the qualified tradesman who does have the skills and personal qualities required of an instructor.

Trained Papua New Guinean manual arts teachers form a part of the division's teaching strength, mainly in vocational centres. One of the division's most promising local officers spent six months at the Blacktown Technical College, New South Wales, in 1971 to gain administrative experience in Technical Education.

#### *Curriculum Development*

Considerable effort has been made during the year to improve the quality of training being offered in technical institutions, as well as the revision of syllabi to meet the changing developments in industry and commerce.

The Technical Division, and technical education generally, through the range of courses being offered, and through the number of students graduating each year, is now having a significant impact on the growth of industry and commerce throughout Papua New Guinea. The relationship between the Technical Division and industry/commerce is one of respect and co-operation, thus ensuring continued expansion and development.

Regular advisory and inspection visits have been made to schools and colleges and a programme of professional development will be implemented in the near future for all teaching staff.

#### *Enrolments*

Some difficulties still exist in recruiting students for technical careers from Form 2 high school students. In conjunction with the Guidance Section, students at high schools are being made aware of the rapid changes in technical fields and the many new opportunities available to students who wish to follow technical careers. Officers on advisory and inspection visits take every opportunity of promoting interest in technical education



through attending District Education Board meetings, and meetings at high schools and primary schools in different areas. Careers advisory pamphlets and bulletins are available for issue to schools and employers throughout Papua New Guinea.

Planning is underway for the opening of the Mount Hagen Technical School in 1973, whilst the first stage of a Food and Hotel School at Lae will be operational also in 1973. The Arawa Technical School opened in 1972 with a small group of trainees who undertook a 1-year practical training course.

Enrolments in institutions offering technical training have increased substantially. However, the number of students undergoing such training is still, in a number of fields, insufficient

to meet the future manpower requirements of Papua New Guinea for skilled technical manpower. The department is further considering ways to increase the number of students undergoing technical training.

#### NATIONAL EDUCATION SYSTEM

(i) Numbers of Technical Schools/Colleges and Vocational Centres at 30 June 1972

|                      | Technical schools/colleges | Vocational centres | Total |
|----------------------|----------------------------|--------------------|-------|
| Government agency .. | 8                          | 48                 | 56    |
| Other agency ..      | ..                         | 25                 | 25    |
| Total ..             | 8                          | 73                 | 81    |

(ii) Technical School/College and Vocational Centre Enrolments at 30 June 1972

|                      | Full-time technical students | Block courses places (Apprentice) | Technical places | School leavers | Vocational trainees | Total |
|----------------------|------------------------------|-----------------------------------|------------------|----------------|---------------------|-------|
| Government agency .. | 2,429                        | 221                               | 142              | 238            | 3,244               | 6,274 |
| Other agencies ..    | ..                           | ..                                | ..               | ..             | 1,225               | 1,225 |
| Total ..             | 2,429                        | 221                               | 142              | 238            | 4,469               | 7,499 |

## CHAPTER 5

### TEACHER EDUCATION

#### Policy

The needs which the Division of Teacher Education will attempt to meet in future are as follows:

- (i) the further development of a form of organisation for teacher education appropriate to the current changes in the education system and to predictable developments;
- (ii) the proper placement of responsibility for such a form of organisation;
- (iii) the attraction of aspirants to the profession who have a higher standard of education than hitherto;
- (iv) the expansion of professional development opportunities for serving teachers;
- (v) the attainment of more thoughtful, realistic and co-ordinated courses for the pre-service and in-service education of teachers; and
- (vi) the continuation of the division's contribution to localisation;

(vii) a closer involvement of the University of Papua New Guinea in the preparation of secondary pre-service students and primary in-service teachers.

#### In-Service Education and Training

*Expansion of In-Service Opportunities.* During 1971 and 1972 in-service programmes have been markedly expanded and it is planned to continue the expansion rate.

While it is always desirable to increase teacher competence, 2 factors make this an urgent necessity at present. The rising standard of education means that the educational standards reached by teachers educated and trained some years ago is found to be quite inadequate for current demands upon them. They must be kept abreast of educational advances, merely to stay competent and to maintain their promotional opportunities as compared to the more recently educated.

Secondly with self-government and independence rapidly approaching it is essential to

strengthen the competence and morale of teachers in preparation for the added burdens and responsibilities that these political changes will bring.

*In-Service Section of the Department.* An in-service cadre (known as the 'In-Service College') has been established within the Department of Education. A Principal was appointed in late 1971 and two professionals of lecturer status will be appointed in 1973. The work of this section is to plan, develop and expand in-service programmes at every level on a national scale.

### *In-Service Programmes*

(i) *Part-time opportunities.* Each administrative district arranges a variety of short courses for particular purposes—such as on school administration, on some new component of the syllabus or on an academic topic, etc. It is planned that teachers will be able to accumulate credits for these courses towards the gaining of a professional certificate.

(ii) *Full-time In-Service courses in districts.* About 600 teachers per year are attending these courses which are mainly 'Form 2 Equivalent' courses (an academic course increasing a teachers background and giving him a promotional qualification). This type of course is also used to introduce major syllabus innovations. Course duration is from 5 to 10 weeks.

(iii) *Full-time In-Service courses in teachers colleges.* In 1972, 240 teachers passed through this type of course, lasting either half or a full year. The courses give either further methods training, or administrative skills (the 'Headmasters Course') and or a promotional qualification.

(iv) *Full-time university studies for serving teachers.* Scholarships for a wide range of tertiary courses (mainly one year diploma or full degree courses) at the University of Papua New Guinea and overseas are offered. About 40 teachers are being sponsored during 1972. Teachers are only selected for sponsorship if they show outstanding executive potential. (see below).

*Executive Assessment Scheme.* The Education Department has, since 1970, been conducting an intensive and meticulously planned scheme for identifying executive talent.

The in-service programme provides places for those selected through the Executive Assessment scheme to receive immediate training before being placed in an administrative post.

*Continuing In-Service Work in Schools.* Two curriculum advisers have been appointed to each district. Their roles are to assist and develop the professional work of teachers. As a means to this end they frequently organise short specific in-service courses.

All headmasters are now required to give continuous in-service supervision to their teachers, and inspectors have to include a headmaster's competence in this respect when they make reports for promotional purposes.

### *Enrolments in Teachers' Colleges*

Both Papua New Guinean and expatriate students are recruited to undertake programmes of teacher education. Students are recruited primarily from those leaving Papua New Guinea secondary schools; smaller numbers are recruited from other sources. All these students attend teachers' colleges locally. The majority are trained as primary teachers while the remainder study at the Goroka Secondary Teachers' College.

Expatriate applications for primary training are received from those with at least 3 years of secondary education. Selected applicants usually have qualifications higher than this and preference is given to those with Papua New Guinea experience or particular trade or vocational skills. Most are mature people. Expatriate students are recruited for secondary training from matriculants and university under-graduates and graduates.

Church education agencies conduct teachers' colleges for the training of Papua New Guinean primary teachers. Recruitment is on the same basis as for the Papua New Guinea Government Departments. Scholarships are available for church nominated expatriate matriculants to study for secondary teaching.

Apart from recruitment for training, experienced teachers are engaged on a contract basis and a significant number are on secondment from Australian State Departments of Education. Experienced teachers are also recruited from other English speaking countries. Church schools and colleges employ volunteers from various overseas voluntary service organisations as well as church teaching orders.

*Primary Teachers' Colleges.* At the end of 1971 the following numbers of students graduated from the primary training colleges and were eligible for employment as teachers in the following categories:

|                                   |            |
|-----------------------------------|------------|
| Teachers .. .. .                  | 23         |
| Teachers Grade 1 .. .. .          | 265        |
| Education Officer Class 1 .. .. . | 334        |
| <b>Total .. .. .</b>              | <b>622</b> |

The planned intake of students in 1972 was 775. Enrolment figures at 30 May 1972 indicated that this target was not reached.

|                      |            |               |
|----------------------|------------|---------------|
| Form II Entry ..     | 232        | 36.5%         |
| Form III Entry ..    | 105        | 16.5%         |
| Form IV Entry ..     | 298        | 47.0%         |
| <b>Total .. .. .</b> | <b>635</b> | <b>100.0%</b> |

At the end of 1971 one small teachers college conducted by a church organisation closed so that in 1972 there were 9 member colleges of the education system training primary teachers. Two of these are conducted by the Government and 7 by church organisations. Percentages of enrolments are:

|                    |              |              |
|--------------------|--------------|--------------|
|                    | 1971         | 1972         |
| Church .. .. .     | 63.5         | 62.4         |
| Government .. .. . | 36.5         | 37.6         |
|                    | <b>100.0</b> | <b>100.0</b> |

In addition to the above enrolments which only relate to Papua New Guineans, a group of expatriate trainees were enrolled at an Administration College on a special course of 6 months duration. Twenty-two trainees graduated from this course at the end of 1971.

*The Secondary Teachers' College.* The Goroka Teachers' College is the only college engaged in the training of teachers for secondary schools. It has a capacity for 400 students.

The college has a planned annual intake of 140 students and as can be seen (table (iii) below) there was an enrolment shortfall in 1972. The programme at the college for secondary trainees consists of 3 years of study involving both general education and specialised education and training. There is a common course in the first year. In the second year students specialise in 2 subject areas. Those offered at present are English,

mathematics, science, art, manual arts, home economics, social science, commerce and business principles, and physical education.

In 1971 47 students graduated as secondary teachers.

Training of expatriate secondary teachers was for many years conducted in Sydney, Australia at the Australian School of Pacific Administration (ASOPA). However the 2-year ASOPA course will be discontinued from 1973 and expatriates recruited in training will undertake a 1-year post-graduate Diploma of Education course (generally at the Canberra College of Advanced Education) as cadetship holders. Some cadetships will continue to be awarded to final year undergraduates.

#### NATIONAL EDUCATION SYSTEM

##### (i) Numbers of Teachers' Colleges at 30 June 1972

|                      | Primary colleges | Secondary colleges | Total     |
|----------------------|------------------|--------------------|-----------|
| Government agency .. | 2                | 1                  | 3         |
| Other agencies       | 7                | ..                 | 7         |
| <b>Total ..</b>      | <b>9</b>         | <b>1</b>           | <b>10</b> |

##### (ii) Primary Teachers' College Enrolments at 30 June 1972

|                      | First year | Second year | Total        |
|----------------------|------------|-------------|--------------|
| Government agency .. | 223        | 346         | 569          |
| Other agencies       | 412        | 531         | 943          |
| <b>Total ..</b>      | <b>635</b> | <b>877</b>  | <b>1,512</b> |

##### (iii) Secondary Teachers' College Enrolments at 30 June 1972

|                      | First year | Second year | Third year | Total      |
|----------------------|------------|-------------|------------|------------|
| Government agency .. | 115        | 128         | 88         | 331        |
| Other agencies       | ..         | ..          | ..         | ..         |
| <b>Total ..</b>      | <b>115</b> | <b>128</b>  | <b>88</b>  | <b>331</b> |



(DIFS photo)

*Mr Rubi Fami, with this striking welded and cut-out metal sculpture which was executed in the Creative Arts Centre at the University of Papua New Guinea.*



(DIES 7)

*(Above) Graduands at the degree conferring ceremony of the University of Papua New Guinea on 3 March 1972.*

*(Below) The first woman graduate, Miss Pauline Bona, receives her degree from Sir Donald Cleland, the Chancellor of the University.*

(Post-Courier 7)





*Three engineering graduates who were among the first awarded degrees from the Papua New Guinea Institute of Technology, Lae on 11 March 1972. (Left to Right) Mr John Kavagu, Mr Gavera Morea and Mr Thomas Tohiana.*

(Post-Courier photo)





(DILS photo)

Artist Mr Kamau Namditu at work in the Creative Arts Centre University of Papua New Guinea.

(iv) *All Teachers' College Enrolments at 30 June 1972*

|                      | Primary colleges | Secondary colleges | Total |
|----------------------|------------------|--------------------|-------|
| Government agency .. | 569              | 331                | 900   |
| Other agencies       | 943              | ..                 | 943   |
| Total ..             | 1,512            | 331                | 1,843 |

## CHAPTER 6

### HIGHER EDUCATION

In conformity with the recommendations of the report of the 1963 Commission on Higher Education, the University of Papua and New Guinea Ordinance and the Institute of Technology Ordinance were passed in 1965, and Councils for the University and the Institute were established.

The University of Papua New Guinea began operations with a preliminary year course in 1966. The University's first Vice-Chancellor (1966-72) was Dr J. T. Gunther, a former Assistant Administrator. The present Vice-Chancellor is Dr K. S. Inglis formerly Professor of History at the Australian National University (Canberra) and the University of Papua New Guinea. Professorial chairs filled so far include English, Biology, Chemistry, Mathematics, Law, History, Education, Anthropology, Economics, Geography, Physics, Geology and Political Studies. A new chair in Agriculture is expected to be filled in 1972.

Professorial chairs, added as a result of the formation of the Medical Faculty have been in Clinical Sciences, Human Biology, Pathology and Social and Preventive Medicine. The University has students undertaking degree courses in Arts, Law, Science, Education, Economics and Medicine (Agriculture from 1973). In 1972 total full-time student enrolment is 853, of which 707 are Papua New Guinean students; of the 356 part-time students 44 are Papua New Guineans.

During 1970 the Papuan Medical College, which had been under the control of the Department of Public Health, became the University's Medical Faculty. Successful students qualify for the awards of Bachelor of Medicine and Bachelor of Surgery. Medical

students complete the preliminary year common to all Form 4 entry university students and then the first year of the B.Sc. degree course before specialising in medical studies.

The Institute of Technology (formerly called the Institute of Higher Technical Education) began its first courses in 1967 with an enrolment of 31 Papua New Guinean students. The Institute's present Director, Dr J. A. Sandoover, formerly Professor of Civil Engineering at Ahmadu Bello University (Nigeria) succeeded Dr W. E. Duncanson, the foundation Director, in 1972. The Institute at Lae has students undertaking diploma courses in Civil Engineering, Surveying, Mechanical and Electrical Engineering, Accountancy/Business Studies and Building Studies.

The Institute also has students undertaking degree studies in Civil Engineering, Electrical Engineering, Mechanical Engineering and Architecture and Building. In 1972 the Institute had an enrolment of 392 full-time and 11 part-time students; 378 of the full-time students are Papua New Guineans. The Institute has been given approval to introduce several new courses in 1973 including a degree course in Chemical Technology, diploma courses in Valuation and Cartography and a certificate course in Surveying.

As a result of the rapid growth of post-secondary institutions, one of the problems currently facing Papua New Guinea is the development of machinery to provide co-ordination of the various institutions in order to achieve desirable enrolment levels in different courses and economies of staff and resources.

The report of the 1971 Committee of Inquiry into Higher Education, under the Chairmanship of Sir Allen Brown, includes recommendations designed to better co-ordinate post-secondary education. The Australian and Papua New Guinean Governments have accepted the Committee's more general recommendations that there be an independent Higher Education Commission which would advise Government on all matters relating to the finance (perhaps a separate Finance Board) and development of the University and the Institute as well as taking a progressively greater interest in the development of other institutions. Such a commission would operate within a policy framework determined by the Papua New Guinea Government. The commission is likely to commence its operations in early 1973.



## CHAPTER 7 ADULT EDUCATION

### *General*

All departments of the Papua New Guinea Government are concerned to some extent in the provision of adult education. The departments most directly concerned are Education, Social Development and Home Affairs, Information and Extension Services, Trade and Industry, Business Development and the Administrator's Department (Division of District Administration).

Departments offering extension courses are the Department of Agriculture Stock and Fisheries, the Department of Forests and the Department of Public Health. Instruction provided by the Department of Public Health includes courses on use and facilities of health services, and on nutrition and health education. Training is provided either in institutions offering formal courses or by means of a wide range of extension activities.

In 1963 an Adult Education Council was established to advise the Papua New Guinea Government on the organisation and development of adult education activities. Because of the many interests involved in adult education matters and because its brief was only advisory, the council did not prove to be an effective body. Consequently in 1971-72 an inter-departmental committee was set up to examine the needs of adult education in Papua New Guinea and to make recommendations on the best way to satisfy these needs. The committee was especially requested to make recommendations that would improve the co-ordination of the very many private organisations, missions, individuals and government departments involved in the adult education function. The committee will report to the Papua New Guinea Government.

### *Adult Education Branch*

There is an Adult Education Branch in the Educational Services Division of the Department of Education. The Branch is headed by the Department's Principal Adult Education Officer.

The activities of the Department of Education are organised to enable programmes in each area to be especially designed to meet the needs of that area, to encourage greater participation at the local level, particularly from local government councils, and to

mobilise more fully resources available locally. Greater use of existing schools, particularly technical schools and vocational centres, and teachers is therefore possible.

Regional Adult Education Officers have been working in the New Guinea Islands, New Guinea mainland and Papua regions since February 1971. To date their activities have been largely explorative in nature with a view to the promotion of adult education in a self-help manner, particularly in regard to the financing of adult education activities.

### *District Organisation*

In 1972 District Adult Education Officers have been working in the Eastern and Western Highlands Districts, Madang, East and West New Britain and Bougainville Districts. Appointments to the remaining districts are to be made as soon as possible.

District Adult Education Committees, responsible to District Education Boards have been set up in many districts to advise on the development and encouragement of adult education activities in the district and to conduct district adult education activities in co-operation with all other interested groups.

District Adult Education Officers act as executive officers of the committee and are responsible for the implementation of the programme. Many courses are of short duration (from 10 to 20 weeks) and since activities may begin and finish at all times of the year it is difficult to enumerate the precise number of persons participating in adult education programmes in any one year.

### *College of External Studies*

The college provides courses for adults and school leavers in general secondary education, the post Form 4 Certificate of Commerce course, and support courses for apprentices. The courses are open to all private persons, apprentices and officers of the Public Service. In 1972, a very considerable increase in enrolments has resulted from the acceptance for enrolment of adolescents leaving the primary school system after receiving a Standard 6 education.

Tuition through the college is provided in 3 ways:

- (i) After hours classes run as part of the District Adult Education Programme. Each class has the assistance of a class teacher.

(ii) Correspondence students who return all lessons to the College for correction and assessment. This form of tuition is reserved for students who live in isolated areas where tutors are not available or there are too few persons to form a class.

(iii) Correspondence studies supervised by a voluntary tutor. This form of study is mainly for students at the Form 1 and 2 levels, who find correspondence study difficult. A large number of students in this category are attending mission teachers' colleges or have formed groups in villages and towns where students cannot find employment.

*Secondary Education* for adults and school leavers is available in a limited range of subjects from Form 1 to Form 4. All 3 forms of tuition are used in secondary education and students normally enrol for 2 subjects at a time. In 1970 there were 88 after-hours secondary classes with a total enrolment of 1,822. In 1971 there were 136 classes with a total enrolment of 3,163 and in 1972 there are 204 classes with a total enrolment of 6,481. Tuition by voluntary tutors in 1970 was given to 1,767 students by 427 registered voluntary tutors. In 1971 the enrolment was 2,246 with 717 registered tutors and in 1972 there are 3,033 enrolments with 301 voluntary tutors. Correspondence (non-tutor) (1970) students numbered 1,007; in 1971 the enrolment was 2,111 and in 1972 it is 4,170.

*Apprentice Support* courses are offered to apprentices receiving training through the block-release programme. Courses are provided to enable apprentices to study during the period each year between full-time studies at each block course. In 1971 these courses were offered to non-apprentices for the first time and there are about 20 non-apprentices enrolled in trade courses in 1972. In 1971 there were 342 apprentices receiving support training and in 1972 there are 702 receiving courses by either full correspondence or in after-hours classes.

*Commerce Certificate* studies were introduced in 1971. At a post Form 4 level, these courses are designed to equip the student with a commercial education, particularly suited to their employment as assistants to accountants of larger firms and organisations, or to handle the accounts of the smaller business such as trade stores and small contractors.

*Enrolments.* The table below shows the number of subject enrolments in the College of External Studies in 1972 and gives approximate figures for enrolments in other adult education activities operated by District Adult Education Committees. The district figures are far from exhaustive since many voluntary and mission groups have a great many staff engaged in a wide variety of adult education activities ranging from literacy to specific skills training.

|   | Full correspondence students (No tuition) | Evening class students | Tutored correspondence students | Totals        |
|---|---|------------------------|---------------------------------|---------------|
| College of External Studies—  |   |                        |                                 |               |
| Form 1 secondary education .. ..  | 877                                       | 2,769                  | 2,011                           | 5,657         |
| Form 2 secondary education .. ..  | 615                                       | 841                    | 552                             | 2,008         |
| Form 3 secondary education .. ..  | 1,525                                     | 1,439                  | 335                             | 3,299         |
| Form 4 secondary education .. ..  | 495                                       | 1,062                  | 135                             | 1,692         |
| Certificate of commerce .. ..   | 99  | 227                    | ..                              | 326           |
| Technical apprentices .. ..   | 559                                       | 143                    | ..                              | 702           |
| <b>Total .. ..</b>  | <b>4,170</b>                              | <b>6,481</b>           | <b>3,033</b>                    | <b>13,684</b> |
| Other adult education activities at 30 June 1972 (varied courses of 10 to 30 weeks duration)— |   |                        |                                 |               |
| Leisure time activities .. ..   | ..  | ..                     | ..                              | 380           |
| Vocational/Skills activities .. ..  | ..  | ..                     | ..                              | 745           |
| Literacy—   |   |                        |                                 |               |
| Pidgin .. ..  | ..  | ..                     | ..                              | 516           |
| English .. ..   | ..  | ..                     | ..                              | 659           |
| Motu .. ..  | ..  | ..                     | ..                              | 38            |
| Village community courses .. ..   | ..  | ..                     | ..                              | 260           |
| <b>Total .. ..</b>  | <b>..</b>                                 | <b>..</b>              | <b>..</b>                       | <b>2,598</b>  |

## CHAPTER 8

### OTHER ASPECTS OF EDUCATION

#### *Special Educational Services Curriculum Development*

Curriculum development, a major concern of the Department generally, has been mentioned earlier in sections of this Report relating to the teaching divisions. The Curriculum Branch within the Education Services Division provides a specialist/resource function for the teaching divisions.

There are now officers working in the social sciences, English, the creative arts and science; a mathematics curriculum officer will shortly join the Branch.

The Secondary Social Science Project continues to be a major concern of the social science team, but primary social studies work is also receiving attention as well as work on history, geography, religious studies, general studies and political education.

A new secondary science course, prepared with UNESCO assistance, is being trialled in 1972 and is expected to be introduced progressively over the next few years. The Primary TPPS Project is also continuing (see *Primary Education*, Chapter 2).

English curriculum work is concentrated at the primary level at present, with work progressing on an anthology of Papua New Guinean verse for secondary schools. Experimental primary work is presently developing a Class 1 programme and associated materials.

The creative arts curriculum officer is director of the new Creative Arts Centre, Waigani, a joint project with the University of Papua New Guinea.

As well as the planning and execution of major projects such as those mentioned above, the Branch has responsibility for the following, in liaison with the teaching divisions:

- the collection and transmission of data on curriculum and methodology;
- fostering the development of committees and boards concerned with the collection and analysis of such data;
- advising divisions concerned on needed revisions and additions to curricula, and on methods of implementing them;

- advising on the need to develop teaching materials, developing such materials and advising on their use; and
- liaison with other divisions and departments on research, and developments affecting curriculum.

The Curriculum Branch, in fulfilling these functions is involved with in-service and pre-service training and in co-operating with the Department of Information and Extension Services, the Political Education Branch of the Division of District Administration, and officers of other departments.

#### *Education Research*

Educational research is co-ordinated by a small research branch in the Educational Services Division of the Department of Education. The branch itself is responsible for producing comprehensive statistics on education and for conducting investigations into general educational problems. A limited research grants scheme, has been operating since 1967 whereby travel, accommodation and incidental expenses are paid to allow approved researchers to work for short periods in Papua New Guinea. An increasing amount of research is also being conducted by people working for higher degrees or associated with the University of Papua New Guinea.

Among the more interesting and potentially valuable research investigations carried out under the auspices of the research grants scheme have been those of Kelly and Gardner. Mr M. Kelly of Sydney's Macquarie University has been undertaking a cross-cultural study of cognitive development, exploring differences in development related to language, cultural background, type of school, age and sex. Dr P. Gardner of Melbourne's Monash University recently compiled a difficulty list of 600 non-scientific words used in science teaching in Papua New Guinea. It is evident from the listing that there are many non-scientific words commonly used in general and vocational type teaching and which are not understood by most students.

The Education Department has a research library with about 10,000 volumes, the majority of which are on education, though other fields are represented.

The library is used by both departmental headquarters personnel, and country borrowers who are mostly teachers.

### *Planning*

A Planning Branch with an initial staff of three planning officers was established within the department at the beginning of 1971. As well as working on departmental planning requirements officers were involved in servicing roles in the development of the new Teaching Service and in handling dealings between the Government and the autonomous tertiary institutions.

The major tasks of the branch over the next year or two will be:

- to prepare and periodically review (in conjunction with overall national planning) both short and long term programmes of educational development;
- to provide projections on the intakes and outputs of the education system;
- to develop 'data bank' resources for educational planning;
- to stimulate, co-ordinate and provide educational planning liaison for various authorities;
- to initiate studies of alternatives in education policy taking into account developments in demographic and educational trends, economic structure, manpower requirements and social and political directions;
- to encourage and co-ordinate independent research on educational planning in Papua New Guinea.

### *Guidance*

The Department of Education provides a guidance service for students in government and non-government schools. The service covers the field of educational and vocational guidance and counselling.

Field services are organised on a regional basis with centres at Port Moresby, Lae, Mt Hagen and Rabaul. Each centre is staffed by a regional guidance officer. Each secondary and technical school has at least one teacher designated as careers adviser to provide students with information on prospective careers.

A clinical service has been established to help teachers cope with atypical children in the classroom.

The Guidance Branch of the Education Department, jointly with the Department of the Public Service Board and Department of Labour, runs a secondary and technical school-leaver programme for placement of school-leavers in training institutions or direct employment.

The Scholarships Section of the Guidance Branch administers a wide range of financial aid schemes which benefit some 705 young Papua New Guinean students both at home and overseas. The bulk of these are secondary students in Australia and tertiary students in Papua New Guinea. There are also tertiary students currently studying in Australia and the University of Hawaii.

Administration scholarships are available for study at the University of Papua New Guinea and the Papua New Guinea Institute of Technology. Scholarships cover all tuition fees, a text book allowance and annual return air fare. A board and lodging and personal allowance component of these scholarships is subject to a means test. Private scholarships are also available at these institutions.

Both the Government and private sponsors offer scholarships to Papua New Guinean students for tertiary study in Australia.

### *Assistance for Secondary Education in Australia*

In the past competitive scholarships have been available to enable Papua New Guinean children to attend secondary schools in Australia. These scholarships are to be phased out. No new awards will be made for 1973. The children currently at school in Australia will continue until they either matriculate or reach the limit of their abilities. The rationale for this phasing out was explained by the Minister for Education in the following terms:

'The scheme started in 1954 when there were no adequate secondary schools in Papua New Guinea and is not relevant now that there are over 70 secondary schools for our students. The cost for each child for each year is over \$1500 and there is considerable evidence that the success rate is not as high when students enter Form I as it is if they are selected later.'

The Australian Government aids expatriate parents to send their children to secondary schools in Australia. A subsidy of \$290 per year for the first child and \$390 for the second and other children attending school in Australia at the same time, plus an annual return air fare, may be granted for these children. In addition a bursary system, subject to a means test, is in operation, the maximum payment for Asian and mixed-race children being \$400, and the maximum for European children being \$322.

As a condition of service, expatriate public servants are entitled to an educational allowance for the education of children of secondary school age in Australia in lieu of subsidy. The allowance is \$675 per year for a child attending a school which charges tuition fees, or \$405 per year where tuition fees are not charged.

### *Examinations*

The Examinations Branch assists and advises on formal assessment for all of the divisions (Primary, Secondary, Technical and Teacher Education) in the department. A special test development project for primary teachers is being undertaken in 1972. It will provide teachers with test material suitable for selecting students through internal assessment in place of the external primary examination (the 'Primary Final') which was held for the last time in 1972. Teachers will also be given sets of mastery tests in various subjects to aid them in deciding where remedial teaching is needed. The primary project will also include the development of standardised tests which will be used for research purposes.

There has been a significant growth in the number of external assessments being carried out in technical studies. These formal external examinations are considered by the various boards of studies controlling technical certificate courses as a first choice technique for controlling the quality of student achievement. (Over 120 external technical examinations will be held in 1972).

As indicated in *Secondary Education*, Chapter 3, there is an increasing emphasis on internal teacher assessment in secondary schools and examinations staff assist with professional advice where possible.

### *School Library Services*

Libraries have been set up and are being maintained in all teachers' colleges, Technical Colleges and Secondary Schools in Papua New Guinea. At present some teachers colleges have a trained librarian; technical schools and secondary schools have a teacher-in-charge of libraries, and trained library assistants are being placed in schools.

Three levels of training are being carried out at present. A 2-year Library Officers course and a 1-year course for Library Assistants are undertaken at the Administrative College. A 5-months course for Library Assistants is given at Goroka Teachers College by the UNESCO Librarian.

The Department of Education provides a subsidy scheme to assist primary schools to purchase library books and to maintain collections.

The School Libraries Office provides manuals on library procedures, bibliographies and selection aids and makes advisory visits to schools.

Increasing interest in school libraries is evidenced by the activities of the School Library Association of Papua New Guinea formed in 1971. It is affiliated with the Australian School Library Association (ASLA) and the Library Association of Australia (Papua New Guinea Branch). Its monthly meetings take the form of workshops. The school Libraries Officer and a Papua New Guinean Libraries Officer from Goroka Teachers' College attended the third Biennial Conference of the ASLA in Brisbane, May 1972.

### *School Publications and Broadcasts*

The Publications and Broadcasts Branch is responsible for the production of various booklets and pamphlets. Regular publications include the *Education Gazette* (circulation 6,500, which is the official medium for the Department of Education's administrative and professional notices; the *Lower Primary School Paper* (circulation 78,000), containing stories and other reading activities for Standard III and IV pupils; the *Upper Primary School Paper* (circulation 58,000), for Standard V and VI pupils; *Our World* (circulation 60,000), a Social Studies magazine for upper primary pupils; the *Journal of Education*; *High School Bulletins* and *Vocational News*. Other educational publications, including school broadcast booklets, are produced as required.

Additional responsibilities of the branch include liaison with the Australian Broadcasting Commission on production of school broadcasts, production of the adult oriented radio programmes *Teachers World* and *Tok Tok Bilong Skul*, and preparation of news releases for distribution to various news media organisations. The branch also advises the department in relation to audio-visual equipment for use in schools.

Educational broadcasts total up to 50 per week and utilise some 14 hours transmission time weekly. Thirty programmes are specifically designed for Papua New Guinean children and most are produced entirely in Papua New Guinea using local scriptwriters and talent.

Broadcasts based on the Papua New Guinea curriculum include:

*LISTEN AND LEARN*—Three series of broadcasts for Preparatory and Standard I classes 3 times a week, and for Standard II classes 5 times a week.

*RADIO MAGAZINE*—A series for Standard III classes broadcast 3 times a week.

*LET'S SPEAK ENGLISH*—A series for Standard IV classes broadcast 4 times a week.

*LET'S USE ENGLISH*—Broadcast 3 times a week for Standard V classes.

*ENGLISH RADIO MAGAZINE*—Broadcast 3 times a week for Standard VI classes.

*SOCIAL STUDIES*—Three weekly series for Standard IV, V and VI classes.

*HEALTH EDUCATION*—A weekly broadcast for upper primary classes.

*CURRENT EVENTS*—Also broadcast weekly for upper primary classes.

*PRIMARY SCIENCE*—A further weekly broadcast for upper primary classes.

*FROM THE LIBRARY SHELF*—A fortnightly series for Form 1 and 2 secondary students.

Broadcasts based on Australian curricula and prepared in Australia are available for use in Australian and Dual Curriculum schools.

Teachers notes and other support publications are available, some free of charge and others at moderate cost. The Australian Broadcasting Commission and the Department of Education co-operate in the production and distribution of support material for locally-produced broadcasts.

A twice weekly programme for teachers, *Teachers World* is in its sixth year of production. The programme, which began in 1967 as *Teachers Teatime*, provides news, information and specialist talks and interviews of interest to teachers. Broadcast during schools' morning recess, *Teachers World* has developed a large and regular audience.

Late in 1971 a new weekly radio programme was commenced. Entitled *Tok Tok Bilong Skul*, the programme presents talks and interviews on educational matters of interest to parents of school children in particular and the public in general. This programme is broadcast in both Pidgin and Police Motu.

### *National Archives of Papua New Guinea*

In January 1972 approval was given by the Administrator's Executive Council for the formal adoption of the name 'National Archives of Papua New Guinea'. Various informal names have been used to designate the archives since the establishment of the Archives Branch within the Department of the Administrator in 1958, but the construction of the new and permanent building for the archives was considered an appropriate occasion for the Government to establish an official name, identifying the archives as a national institution.

The National Archives continues as an administrative branch of the Department of Social Development and Home Affairs, and is the responsibility of the Minister in charge of that Department, the Minister for the Interior.

The erection of a building for the National Archives is of paramount significance. The story of the archives has been one of frequent shortages of storage space. Now there is a building which will provide sufficient storage for a number of years.

The building was designed as an air-conditioned repository and workroom area capable of holding 10,000 feet of records in free-standing shelving, and a detached office/research room area linked to the repository area by a covered way. The contract price was \$91,000. The repository area is further divided into 3 separate fireproof areas each equipped with smoke detectors, a workroom for reception and sorting out of documents, and the air-conditioned plant room. Free standing shelving has been used but provision was made during the planning and building stages for the floor to be of a strength sufficient to take the weight load of mobile shelving, which will increase the capacity of the building to approximately 18,000 feet of records.

The new building was officially opened by the Governor-General of Australia, Sir Paul Hasluck, on 20 April 1972. In his speech at the opening ceremony, Sir Paul emphasised the importance of archives as part of good administrative procedures and urged young public servants to get into the habit of 'looking back in the files'.

As the archives repository had been completely filled for over 2 years, large quantities of records had accumulated in departmental registries awaiting transfer to the archives upon the completion of the new

building. Over 900 feet of records have been received since the new building was finished, and it has been necessary to call a temporary halt to the receipt of new material whilst further shelving is installed, and to allow time for archives staff to sort out properly the material received.

The number of file requisitions by departments has continued to increase (43 per cent increase over the 1970-71 figure) and so too has the number of researchers making use of the archives. It is clear that the archives is regarded as an important institution for research on a number of disciplines, notably history, economics, and anthropology. The researchers have come from Australian and overseas universities as well as from the University of Papua New Guinea and the New Guinea Research Unit.

The programme to copy and return records of the Papua New Guinea Government which were transferred to Canberra during and after the Second World War has continued; micro-film copies of many of these record series have been purchased so that the originals (many of which are in a fragile condition) need not be handled frequently.

In February 1972 the Australian Minister of State for External Territories announced that officers of the Commonwealth Archives Office would undertake an examination of records of the Administration with the intention of removing some records described as 'essentially Australian' and copying others to ensure that the Australian record of its administration of Papua New Guinea was complete. This announcement caused some concern in Papua New Guinea and Australia. It was thought that some records might be removed against Papua New Guinea's interest, and the historical record. This concern was the subject of a petition to the United Nations by the Pangu Party. Subsequently the Australian Minister of State for External Territories defined the types of records which would be removed:

'These documents are directly related to the interests of the Commonwealth and their removal in no way affects the historical records of this country. The kinds of documents that are being removed refer to such things as Australia's own defence and Australia's relations with other independent countries. They do not form part of the record of the administration and development of Papua New Guinea . . . In

bringing the exercise to completion, those concerned are under instructions to ensure that the historical records of Papua New Guinea are not broken, or in any way prejudiced. I've also directed that where there is any doubt, the papers must remain.'

The Australian Government, therefore, has clearly stated that the records of the Administration of Papua New Guinea will remain the property of the Papua New Guinea Government.

The Minister of State for External Territories also announced that officers of his department would examine the possibility of making copies of documents of the Australian Government which would replace some of the records lost or destroyed during the war.

#### *Broadcasting, Publications and Films*

*Ministerial Responsibility.* During the year under review the Papua New Guinea Ministry exercised full authority and final responsibility in respect of the functions of the Department of Information and Extension Services, in relation to internal publicity and information and extension services; the development of literature, artists and writers; the preparation of publications, films and visual material; broadcasting by Papua New Guinea Government radio stations (but not broadcasting programme policy); and library services. The Administering Authority retained responsibility for broadcasting and television policy generally and for overseas broadcasting and broadcasting programme policy and Government radio stations.

In the Second House of Assembly the Assistant Ministerial Member responsible for Information and Extension Services was Mr Wesani Iwoksim, MHA. In the Third House of Assembly the Minister for Information is Mr Paulus Arek, MHA.

Because of the level of illiteracy and the difficulties of distributing other forms of material broadcasting continues to be the most widely used of the mass media in Papua New Guinea.

There are 2 separate broadcasting services in Papua New Guinea. One is operated by the Australian Broadcasting Commission (ABC) and the other by the Papua New Guinea Government Department of Information and Extension Services.

A report on a proposal which emanated from the House in 1970, to set up a single broadcasting authority to take over the operations by the 2 existing services was presented to the House of Assembly in November 1972. Following the third House of Assembly elections the Administrator's Executive Council decided that the authority should be set up by December 1973 or as soon as possible thereafter. Action to prepare the necessary legislation had commenced and Australian and Papua New Guinea departments and authorities are co-operating in the more detailed arrangements.

One of the advantages of radio is that local languages can be used readily, including languages for which there is no standard written form. Radio is used extensively for broadcasts to schools. Import duty on low cost receivers continues to be at the nominal rate of 5 per cent. While firm figures are not available the number of radio sets in use continues to increase. The introduction of local stations using local languages invariably results in a sharp increase in the number of sets in rural areas. Many local government councils buy radio sets for community listening centres.

A company which, in 1970, was granted Pioneer Industry status to produce low cost receivers for domestic use has not yet made any impact on the local market.

Government stations broadcasts are directed to the Papua New Guinea people at large, especially those living in villages in the rural areas. ABC programmes are designed to cover all sections of the community.

*Australian Broadcasting Commission.* The ABC has its Papua New Guinea headquarters at Port Moresby and broadcasts from the hour of 6 a.m. to midnight daily. Its programmes are transmitted from Port Moresby over 3 transmitters simultaneously—1 medium wave (9PA), and 2 short wave (VLK and VLT), and carried by microwave link to the medium wave stations 9LA Lae, 9GR Goroka, 9MD Madang and 9RB Rabaul. The ABC also has daytime use, on a week-day basis, of the Government's short wave stations at Rabaul and Wewak, under call signs VH9RA, and VH9ZJ, as an extension of its schools broadcasts coverage. As well as relaying programmes from Port Moresby, 9RB produces programmes specially designed for the area which it services, the densely populated Gazelle Peninsula.

The Port Moresby station broadcasts mainly in English with Pidgin and Hiri Motu being used at some of the more popular listening times, including for news bulletins and information services. The Rabaul station uses English, Pidgin and Kuanua, the vernacular of the Gazelle Peninsula people. In Lae, the ABC shares office and studio accommodation with the Department of Information and Extension Services in the Morobe Broadcasting Centre. By using the 2-way micro-wave link, special programmes are broadcast nation-wide from the Lae studio. The Rural Broadcasts section has set up headquarters in Lae, a central location for the rich agricultural areas of the Morobe District and the Highlands.

The process of integrating material for Papua New Guinea listeners into the overall programme has been continued and has undoubtedly contributed to better mutual understanding between different sections of the community. Most of the more popular listening periods are devoted to such programmes.

The ABC News Service in Papua New Guinea, broadcasts more than 5,000 internal bulletins a year, making use of English, Simple English, Pidgin, Motu and Kuanua. Of the 98 minutes of internal bulletin time, 55 minutes are devoted to Simple English and lingual bulletins, other than English. Bulletins from Australia are also taken at prime time throughout each day, with an increasing emphasis on those from Radio Australia, which provide a comprehensive international service. More News-in-Brief bulletins from Australia have also been introduced between major news broadcasts. During meetings of the House of Assembly, a weekly summary of the main points from the House of 24 minutes duration is broadcast each Saturday evening in English, Pidgin and Motu, with a replay early Sunday mornings. Localisation of news operations is well advanced.

Of particular importance are the Australian Broadcasting Commission's broadcasts to schools. During the year, more programmes prepared especially for Papua New Guinea children were introduced and these are gradually taking the place of broadcasts originating in Australia.

Education broadcasts total 47 a week, 31 of which are specially produced for Papua New Guinea school children. Twenty programmes are produced in Papua New



Guinea using local scriptwriters and talent. Broadcasts based on the Papua New Guinea syllabus for schools, include: 'Radio Magazine' Standard 3, 'Let's Use English' Standard 5, and 'Let's Speak English' Standard 4 broadcast on 4 days a week. 'Listen and Learn' Standard 2 broadcast 5 days a week. 'Listen and Learn' Standard 1 and Preparatory, each broadcast on 3 days a week. 'Social Studies'—'Singing and Listening', 'School Service' for the lower primary grades. 'Once Upon a Time' and 'Let's Join In' for infant grades. 'In Tune' and special radio features, for secondary school students. Teachers notes for all programmes, are prepared by the ABC's school broadcasts staff and printed by the Department of Education. All broadcast material is now sold to teachers. As well as these, appropriate Australian broadcast material is available for sale in Papua New Guinea. 'Teacher's World', a programme for teachers, is prepared by the Department of Education and produced by the ABC. There are 2 programmes each week. A programme for parents, 'Toktok Bilong Skul', in Motu and Pidgin is presented in the evening, once a week.

*Papua New Guinea Government Stations.* No additional stations were brought into use during 1971-72 but by the end of the year work was in progress on stations to serve the Chimbu, Northern, Southern Highlands, New Ireland and West New Britain Districts. In addition a station at Alotau in the Milne Bay District to replace the station at Samarai was under construction. It is anticipated that by June 1973 there will be a Government station in all districts except the Central, West Sepik and Manus districts.

Each Government station arranges programmes to suit local conditions. A good deal of material is supplied from the headquarters of the service in Port Moresby. Particular importance is attached to news and current affairs programmes. Material for such programmes is broadcast from the Central News Room to stations for 2 hours daily, 1 in the morning and one in the afternoon. The material is normally broadcast in English and Pidgin and Hiri Motu, the widely used lingua franca, and deals with national and international topics. In the stations this information is supplemented by information drawn from the districts concerned, much of it supplied by unpaid correspondents.

The programmes broadcast by Radio Rabaul are directed mainly at the Gazelle Peninsula and East New Britain. At this stage Radio Rabaul continues to broadcast to New Ireland and West New Britain pending completion of stations in those districts. A branch office is maintained in Kavieng and material for inclusion in regular programmes for the people of New Ireland is provided from there.

Radio Wewak was established before the former Sepik District was divided into 2 districts. It continues to broadcast to both districts but it is intended to build a station at Vanimo later to serve the West Sepik. Of the other stations each broadcasts to 1 district only.

Government stations are staffed mainly by Papua New Guineans who do all of the announcing and produce on increasing proportion of programmes. The station staff are assisted by programme advisory committees consisting mainly of representatives of the Papua New Guinean people.

Station staff travel extensively in their districts, visiting villages to record talks and interviews and musical items, both traditional items and introduced music performed by local groups. Information for local news bulletins is collected also and programmes are discussed with listeners.

To a very limited extent the Government continues to supply radio sets to villages in areas where listening to radio has not yet become established. The fact is that radio is now well known in most parts of the country and village people are encouraged to buy sets for themselves when they realise the relevance of what is broadcast for them.

Government stations, by a direction of the House of Assembly, broadcast a segment of House proceedings, namely Questions Without Notice. Each station broadcasts in either Pidgin or Hiri Motu, whichever is more appropriate for the district. The proceedings are recorded and prepared for broadcasting using only what is spoken on the floor and the official simultaneous translations.

In addition to providing an extensive coverage of House proceedings in its national news bulletins the Government's Central News Room provides additional reports on tapes. These additional reports highlight matters of importance to particular districts.

All stations give particular attention to the proceedings and activities of local government councils in their areas. In some cases proceedings are recorded and parts are broadcast. In other cases reports are prepared. Meetings of district local government conferences are reported in detail. Special programmes prepared by the Local Government Association are broadcast by all stations. Radio is being used effectively to arouse interest in local government and to increase the accountability of councils and individual councillors to taxpayers.

All departments and authorities with field staff in the areas served by stations are encouraged to make use of radio to assist them in their extension and community education programmes. There is some variation from district to district but stations broadcast a wide range of programmes covering the fields of agriculture, health, forestry, local government, co-operatives and savings and loans societies, law, business promotion and investment, etc. Programmes produced in the districts dealing with district situations are supplemented by programmes of national and general interest prepared at the headquarters of the broadcasting service.

A strong feature of Government broadcasting is what is known as service calls. Information provided by public and private organisations about meetings, tours of officials and leaders, malaria control and immunisation programmes, shipping movements, marketing and the availability of land for leasing for special purposes, etc. are broadcast in the various languages. This service is particularly important in a country where radio is the only practicable medium of mass communication.

Another feature of Government broadcasting is the use made of locally recorded music, both traditional and introduced. Village groups come forward eagerly to be recorded. The stations have collectively built up a vast collection of local music which will be valued by the people of Papua New Guinea in the years ahead.

All stations receive a considerable volume of correspondence from listeners. In June 1972 the 10 stations reported a total of 22,286 letters received. While the majority of letters are for particular musical items to be played, many (the number was 3,475 in June) contain news items, information of general

interest, comments on current affairs and questions. This material is drawn on heavily for programmes and officers from appropriate departments of the Papua New Guinea Government or other authorities are called on for comment where necessary.

Particular attention is given to building up and maintaining a rapport between the station and its staff on the one hand and village listeners on the other. Tours by staff, advisory committees local news bulletins, the use of local languages and announcers drawn from the area, correspondence, local music—all contribute to this. Progressively, as listening habits become established, more programmes of a national and developmental nature are introduced.

Following the appointment in 1970-71 of 3 programme specialists, increased attention to training in particular aspects of broadcasting has been possible. Specialisation is most advanced in the news field and a comprehensive training scheme has been introduced, with an experienced overseas officer working full-time in this field. The appointment by the department of an English tutor and an instructor in typing has contributed to the effectiveness of the training programme.

*Publications.* In Appendix XXVIII is found a list of some publications produced in Papua New Guinea. The number and range of publications continues to increase steadily and the list is not necessarily complete. The more advanced educational institutions and groups within those institutions are producing publications. The Publications Branch of the Department of Information and Extension Services gives advice and other assistance in connection with many of these publications and the editors are able to draw on the department's photographic library for illustrative material.

Later in this Chapter, under *Supply of Literature* some additional publications of the Department of Information and Extension Services are listed.

*Films.* The Department of Information and Extension Services has a total of 33 full-time projectionists working in the field. These operate 33 16 mm projection units, including 8 fully-equipped cinema vans. During the year these projectionists conducted more than 3,500 film screenings throughout Papua New Guinea.

The film library, operated by the same department now contains 3,920 films available to the 638 registered borrowers (including the department's own cinema units); 672 new films were added during the year; apart from films borrowed by people who called at the library in Port Moresby, 13,860 films were consigned to borrowers outside Port Moresby, mainly by air. Several commercial undertakings with small collections of educational and technical films have lodged them with the department's library to facilitate distribution.

In addition to 16 mm films the department has small libraries of 8 mm films, loop films, film strips, etc. which are borrowed extensively.

The United Nations Information Centre also maintains a library of 35 mm and 16 mm films. The Commonwealth National Film Library at Canberra lends films to accredited Papua New Guinea institutions and increasing use is being made of this service.

The various educational institutions in Papua New Guinea, particularly the University, including its Educational Materials Centre, are building up collections of films and film material which may be borrowed by appropriate groups.

Use of all the above film services is free, with borrowers required to pay return freight only on films.

In addition there are now 2 commercial film libraries offering 16 mm films. One is in Port Moresby, the other is in Lae.

*Film Production.* A film production unit with the Department of Information and Extension Services produces films. Most of these are on 16 mm but it has facilities for 8 mm films also. Films released during 1971-72 included the following:

'Someone Like You'—a publicity film for the Institute of Technology. 900 feet.

'Child Nutrition'—produced in association with the Nestles organisation and the Department of Public Health. 1,150 feet. Separate versions in English, Melanesian, Pidgin and Police Motu.

'Goroka Local Government Council'—produced for the Commissioner for Local Government to illustrate the functions and activities of a council. 900 feet.

'Malaria'—an extension film. 800 feet.

'Outstation Management'—a training film for the Division of District Administration. 460 feet.

'Weaving' (3 parts)—a training film produced for the Department of Business Development. 2,000 feet in all.

'Cattle'—another in a series of extension films. 650 feet.

'Grow Good Pigs'—another extension film in several parts. 2,400 feet.

'Grow Good Vegetables'—another in a series of extension films. 800 feet.

A further 18 films were in production at the end of the year.

The staff of the Government's film unit has filmed material on a wide range of subjects for television release in Australia. The Australian Department of External Territories arranges for the preparation and distribution of this material. In addition, the latter Department's Information and Publicity Branch has continued to prepare items using material taken from other films, for television release. Some items have been in colour for overseas release.

The Tourist Board is building up a film unit. Three films were released in 1971-72. They were 'New Guinea Cruise', 'Rabaul—the Past Remains' and 'On the Threshold' which deals with the Huri people of the Southern Highlands. The staff of the board's unit and the Government's unit work in close co-operation.

To assist with overseas publicity for Papua New Guinea the Australian Department of External Territories has continued to call on the services of the Commonwealth Film Unit to produce films.

#### *Other Audio-Visual Materials*

During the year photographers of the Department of Information and Extension Services travelled extensively to add to the collection of black and white and colour photographs. A total of 34,000 black and white prints were supplied, in addition to colour transparencies and colour prints. 111 film strips were printed.

In addition to books and pamphlets referred to in this Chapter, the department has produced a wide range of material for extension and community education purposes. Production of extension kits for the Department

of Agriculture Stock and Fisheries dealing with primary industries has continued. The kits normally included films, film strips, booklets, posters, wall sheets, flip charts, and flannelgraphs. Extension programmes are supported by broadcasts over Government stations.

The Extension Branch of the Department continues to conduct courses for other departments in extension—theory, methods and techniques—audio-visual aids and communication. Some of the instruction is given as part of the training programme at training centres operated by other departments. At other times courses are arranged for the purpose. The aim of all of these courses is to make field officers more aware of the importance of good relations with local people and to help them to be more effective in their work.

#### Training

*Broadcasts Division.* One course for Assistant Broadcasts Officers lasting approximately 6 weeks was held in which 12 officers participated.

Two 3-month courses were conducted for journalists which are the first segment of a 3-year training period.

In addition, there was 1 course for Papua New Guinean Agricultural Officers who will be involved in broadcasting conducted by an officer who has had extensive experience in such work in developing countries.

More courses were planned for Assistant Broadcasts Officers but lack of travel funds and difficulty in recruiting training staff prevented these from taking place.

#### Induction Courses Commercial Courses

The following courses were conducted by the Training Section during 1971-72:

- 4 Induction courses involving a total of 44 officers, conducted at headquarters.
- 2 Short business correspondence courses involving 24 officers, at headquarters.
- 2 courses of shorthand and typing involving 41 officers at headquarters.
- 1 course of English tuition for 12 officers at headquarters.

#### Public Libraries

The Public Library, with its headquarters in Port Moresby, had 21 branches operating at the end of the year. The number of books in

each library at that time and the approximate number of take-away borrowings for the month of June were as follows:

| Location            | Number of books | Number borrowed |
|---------------------|-----------------|-----------------|
| *Port Moresby .. .. | 22,617          | 7,900           |
| *Rabaul .. ..       | 19,262          | 4,880           |
| *Lae .. ..          | 12,827          | 5,686           |
| Samarai .. ..       | 6,310           | 2,000           |
| *Madang .. ..       | 8,350           | 2,100           |
| Wewak .. ..         | 5,557           | 1,040           |
| *Goroka .. ..       | 8,152           | 3,460           |
| Mount Hagen .. ..   | 3,426           | 1,260           |
| Bulolo .. ..        | 5,653           | 1,940           |
| Daru .. ..          | 2,414           | 220             |
| Kavieng .. ..       | 4,315           | 870             |
| *Popondetta .. ..   | 3,502           | 1,150           |
| Mendi .. ..         | 2,487           | 520             |
| Wau .. ..           | 5,749           | 1,110           |
| Hohola .. ..        | 1,891           | 560             |
| Kerema .. ..        | 2,554           | 350             |
| Kundiawa .. ..      | 2,693           | 775             |
| Hutjena .. ..       | 2,341           | 105             |
| Lorengau .. ..      | 1,487           | 280             |
| Vanimo .. ..        | 1,565           | 300             |
| Alotau .. ..        | 906             | 240             |
| Total .. ..         | 124,058         | 36,746          |

An asterisk (\*) indicates that a library has full time staff.

Other libraries are open for a limited number of hours each week. The library at Goroka is wholly staffed and operated by the Goroka Local Government Council. At Wewak the library is housed in a building erected by the local government council. Other councils are negotiating to erect library buildings. While the central Government continues to be responsible for library services, local government councils are encouraged to participate as their resources permit. Where a council puts up a building the Government will consider paying rent for it over a period of 4 or 5 years to assist the council in paying off any money borrowed for the purpose. The Government continues to supply regular quotas of books to all libraries irrespective of council involvement but some councils also allocate funds specifically for the purchase of books.

As the number of libraries is so small, country borrowing is encouraged. Records show that in June some 2,300 books were despatched to country borrowers.

The practice is still for books to be purchased, catalogued and processed for placing on shelves by the headquarters of the Public Library service.

### *Supply of Literature*

The Library services referred to above, together with the various newsheets and other reading material published by the Government and the missions, provide the main source of literature for the population. A list of the regular main publications in Papua New Guinea appears at Appendix XXVIII.

The Literature Bureau has continued to make progress. During the year the expatriate officer-in-charge has been joined by a local counterpart. With such a small staff what can be attempted is limited. The emphasis has continued to be on creative writing. The work of the Bureau has complemented the work of the creative writing school at the University of Papua New Guinea and the mission Creative Training Centre at Kristen Press near Madang. A number of short courses were conducted throughout Papua New Guinea, in conjunction with the Department of Education, for secondary school and teachers' college students.

The major activity of the Bureau is the production of the quarterly Papua New Guinea Writing designed to provide an outlet for local writers. The format and layout were revised early in the year. Guaranteed sales, combining subscriptions and standing orders, have more than doubled over the year. Because of a change in the position of editor, only 3 numbers were released during the year. Increased attention has been given to sales promotion and there is a steady flow of material for publication. Many of the items first released in Papua New Guinea Writing are now sought by other publishers. Payments to Papua New Guinea writers for material published in Papua New Guinea Writing were about \$500 for the year.

Another important activity of the Bureau is to conduct competitions. These include annual short story, poetry and play competitions. In addition the bureau conducted successful play and poster competitions in support of the Political Education Programme. The bureau is conducting a first annual film award.

Another literary publication is *Kovave*. This was initiated by the Creative Writing School at the University. It is now edited by a Papua New Guinean and is published by an Australian firm.

The Bureau keeps in touch with various bodies in the country which produce literature for local people. The aim is to ensure the

widest possible distribution of whatever is printed or to arrange the publication of material for which there is a widespread need.

The Publications Branch of the Department of Information and Extension Services has a responsibility for producing printed material to meet the needs of departments and governmental authorities. In general, the material is produced free but to an increasing degree departments are producing material for sale. The Publications Branch assists other departments with their publications in varying ways. The branch also liaises closely with the Government Printer to facilitate the printing of publications. The branch continues to operate a small offset plant of its own which is used particularly to print material where only small quantities are needed or which is required in an emergency. The branch draws heavily on the Art and Photographic Sections of the department.

Most of the publications are in English and Pidgin. Occasionally other languages are used, Hiri Motu more than others.

An illustrative list of publications released during 1971-72 is as follows:

'The United Nations—Basic Facts for the People of Papua New Guinea'. 2,000 copies for schools.

Reprint of the Official Directory (by the Government Printer). Covers House of Assembly, Judiciary, Departments and Authorities. 2,000.

First edition of 'Members of the Third House of Assembly'. To be followed by a high quality publication which will include the Ministry, House Committees, etc.

An illustrated leaflet on the Port Moresby Community Development Group. 2,000.

'Government and Independence', a booklet for the Political Education Committee. 2,000.

Maps of the Roads of Papua New Guinea. 5,000. Other maps.

Film catalogues.

Range of explanatory papers on the country's Annual Budget.

'Another Look at the Development Programme' for the Office of Programming and Co-ordination.

Charts to provide locations, frequencies, etc. of Government broadcasting stations.

The Government provides a newsagency service for press and radio in Papua New Guinea through the Information Branch of the Department of Information and Extension Services. This is used by the ABC and the Government's broadcasting service, local newspapers and correspondents of overseas newspapers and of Australian Associated Press. Material collected in the districts by Government broadcasting station staff is fed into this service.

The Information Branch also assists departments and governmental authorities with their publicity needs. The main office is at Port Moresby with branches at Rabaul, Lae and Goroka. During the year a total of 3,375 press releases were issued from the main office. Papua New Guinean staff are playing an in-

creasingly important part in the preparation of these releases. Publicity programmes arranged during the year covered a wide range of subjects including the following: opening of the Musa Oil Palm Factory, the skip-jack tuna industry in New Ireland waters, the National Census, measures to allay concern following earthquake and tidal wave activity, preparation of publications dealing with revisions to the development programme, the Commission of Inquiry into Alcoholic Drink, Third House of Assembly Elections, the Visit of the U.N. Mission to cover the Elections, the Economic Intelligence Unit's survey of under-developed districts, Metric Conversion Commission and the Investment Corporation. The Branch also compiles the weekly reports on House of Assembly proceedings which are published by the department.

## PART IX. RESOLUTIONS AND RECOMMENDATIONS OF THE GENERAL ASSEMBLY AND THE TRUSTEESHIP COUNCIL

This part describes measures that had been, or were being taken before 1 February 1973 in relation to the Conclusions and Recommendations on Papua New Guinea made by the Trusteeship Council on 13 June 1972 and adopted by the General Assembly on 14 December 1972 (Resolution 2977 (XXVII)).

### GENERAL ASSEMBLY

The Trusteeship Council and the Committee of 24 will be kept informed of action taken to implement Resolution 2977 (XXVII), a task which will be greatly facilitated by Australia's renewed membership of the Committee of 24.

### TRUSTEESHIP COUNCIL

The Conclusions and Recommendations made by the Trusteeship Council have been noted and considered by the Administering Authority. The Conclusions and Recommendations, together with the comments of the Administering Authority upon each section, are set forth below.

#### A. GENERAL

##### LAND AND PEOPLE

*The Trusteeship Council, which has previously expressed the hope that Papua New Guinea would develop a strong sense of nationhood, thereby permitting it to move to self-government and independence as a single*

*country, notes with particular satisfaction the comment of the Special Adviser that it has taken a significant step toward nationhood with the formation of the first indigenous national government. The Council notes with approval that the Ministry formed by the coalition as a result of the recent elections represents all but three of the main population groups in the country and includes representatives from Bougainville where separatist tendencies are reportedly the strongest. The Trusteeship Council also notes with approval that the group of Papuan members of the House of Assembly, which visited Canberra with a request for special treatment for Papua, went on record in favour of national unity for Papua New Guinea.*

*The Council, which noted with particular satisfaction at its thirty-eighth session that the Territory had participated for the first time in international organizations, is pleased to take note of the admission of Papua New Guinea to associate membership in the World Health Organization (WHO). The Council also notes with interest that the Administering Authority has instituted a programme of training Papuans and New Guineans for future work in their country's foreign service. The Council takes note of the statement in the supplementary report on Papua New Guinea for 1 July 1971 to 12 May 1972 prepared by the Administering Authority that 'for all practical*

*purposes both within and without Papua New Guinea, there is no difference between the rights of the inhabitants of the separate territories'. The Council hopes that the Government of Papua New Guinea will continue its efforts to devise a single citizenship law for the whole Territory.*

*The Council notes the decision of the Administrator's Executive Council that National Day will be celebrated annually as a nationwide holiday on 15 September.*

The National Coalition Government of Papua New Guinea has frequently expressed its commitment to national unity. Speaking in the House of Assembly on 29 September 1972, the Chief Minister, Mr Michael Somare, said 'I wish to reassure this House that whilst my Government is most sympathetic to decentralization of power, it will not accept any proposals that might endanger a united Papua New Guinea'.

A Constitutional Planning Committee consisting of members of the House of Assembly, was established by the Papua New Guinea Government in September 1972. The establishment of the Committee had been approved by the House of Assembly on 27 June 1972. The main Term of Reference of the Committee is 'to make recommendations for a constitution for full internal self-government in a united Papua New Guinea with a view to eventual independence'. The Terms of Reference also provide that the matters to be considered by the Committee for possible incorporation into the Constitution or related documents should include citizenship. The Committee has already circulated for discussion throughout Papua New Guinea proposals for incorporation in a single citizenship law for Papua New Guinea.

## **B. POLITICAL ADVANCEMENT**

### **DEVELOPMENT OF REPRESENTATIVE, EXECUTIVE AND LEGISLATIVE ORGANS AND THE EXTENSION OF THEIR POWERS**

*The Council notes with satisfaction that as a result of the 1972 elections, Papua New Guinea has an even more predominantly Papua New Guinea legislature with 90 members of the Third House of Assembly being Papuans and New Guineans and with expatriate members of the House reduced from 27*

*to 9. The Council also welcomes the reduction in the numbers and in the responsibilities of the official members in the House. The Council also welcomes the establishment of a ministerial system whereby, as the Australian Minister of External Territories has stated, indigenous ministers as part of an elected executive formulate and determine policy over a wide range of government activities. The Council notes that the ministerial members of the Administrator's Executive Council, as part of an executive led by a Chief Minister, although formally accountable to the Council will, in practice, be responsible to the House of Assembly. The Council particularly welcomes the assurance of the Minister of External Territories that the importance of the senior elected representative in Papua New Guinea, the Deputy Chairman of the Administrator's Executive Council—in effect the Chief Minister—will become increasingly apparent as the Administrator gradually withdraws from playing an active role as Chairman of the Council. The Council welcomes the assurance by the Administering Authority that the power of veto will not be used in areas where ministers have full and final authority. The Council notes with satisfaction that for the second successive year the veto has not in fact been used.*

*The Council notes that, in accordance with the decision of the Second House of Assembly, the administering Power has prepared a programme which lists the legislative and administrative actions that will be required before self-government, including a progressive transfer to the Government of Papua New Guinea of those areas of government where the Administering Authority still retains final responsibility. The Council welcomes all these measures as significant steps in the political advancement of the Territory and looks forward to hearing at its next session how the exercise of its increasing powers by the Government is working.*

*The Council also notes from the statement of the Special Adviser representing the National Coalition that it is the intention of the new Government to establish a constitutional committee to examine the present system of government and to establish whether it is suitable for the future needs of Papua New Guinea. The Council wishes to express the hope that as the report of such a committee may be the basis for far-reaching changes in the country's constitutional framework affecting all the people of Papua New Guinea, all sections of the population, including the main*

opposition party, will be given the opportunity to make their views known to the committee. The Council also hopes that these views will be taken into account in the formulation of the committee's recommendations.

During talks between the Papua New Guinea Ministry and the Australian Minister of State for External Territories in August 1972 it was agreed that, subject to the approval of the House of Assembly, full authority and final responsibility for the following matters should be transferred to the Papua New Guinea Government:

- Cocoa Appeal Committee
- Coffee Appeal Committee
- Rubber Board
- Supply of goods and services
- Supply and Tenders Board
- Wages and Industrial Relations Policy—private sector
- Pollution etc., control
- Arawa Municipal Commission
- Area Authorities
- Migration Policy—excluding security aspects
- Papua New Guinea Harbours Board
- Administration Fleet Policy
- Political Education
- Localisation and training—private sector
- Parliamentary Drafting
- Bankruptcy and Insolvency
- Probate and Administration
- Registration of births, deaths and marriages
- Economic Development Programme structure
- Culture
- Volunteer Policy
- Tariff Advisory Committee
- Selective Entry for Employment
- Land Settlement and Development Policy
- Income Tax Review Tribunal

The House of Assembly approved the transfer of authority and responsibility in respect of these matters on 14 November 1972.

During the August talks it was also agreed that positions of Ministerial Spokesman for Defence and Ministerial Spokesman for Police in the House of Assembly should be created. Initially the Chief Minister assumed responsibility for both these positions. It was agreed that whilst the creation of these positions did not involve a transfer of authority, the Chief Minister as Defence Spokesman and Police Spokesman would assume responsibility for answering questions and making

statements on Defence matters in the House of Assembly, for consulting the Administrator and leading discussions in the Administrator's Executive Council in regard to the development of the Papua New Guinea Defence Force and the Police Force and policies associated with them and for undertaking ceremonial duties in relation to the Defence Force and the Police Force. It was also agreed during the August 1972 Constitutional talks that responsibility for the District Division of District Administration could be transferred at the end of 1972, if the House of Assembly so approved. On 23 November 1972 the House of Assembly approved that the Papua New Guinea Government should request the Australian Government to transfer authority and responsibility for the functions carried out by the Division of District Administration, the Division of Intelligence and Security and the Civil Defence Organisation and also the functions in relation to Area Authorities carried out by the Office of Local Government.

The Constitutional Planning Committee has made extensive arrangements for the discussion of issues being stated by the Committee throughout Papua New Guinea. For this purpose, the services of the Government Liaison Branch of the Office of the Chief Minister have been made available as a channel of communication between the Committee and the people. It is planned to establish some 400 discussion groups throughout Papua New Guinea, most of which will be led by Papua New Guineans. During 1973 the Committee will make extensive tours throughout Papua New Guinea to seek the views of the people. In addition the Committee will consider written submissions.

The Committee itself is representative of the regions of Papua New Guinea and of the political groupings within the House. It includes 6 members of the Opposition United Party. The members of the Committee are:

- Mr Michael T. Somare (Chief Minister), Chairman *ex officio*;
- Fr John L. Momis (Pangau, Bougainville Regional), Deputy Chairman;
- Mr Angmai Bilas (United Party, Madang Open);
- Dr John Guise (Chairman of a former Select Committee on Constitutional Development);
- Mr John Kaputin (Mataungan, Rabual Open);



Mr John Kaupa (National Party, Chuave Open);  
 Mr Mackenzie Daugi, United Party, Northern Regional);  
 Mr Matiabe Yuwi (United Party, Tari-Komo Open);  
 Mr Paul Langro (United Party, West Sepik Regional);  
 Mr Paulus Arek (Chairman of a former Select Committee on Constitutional Development);  
 Mr Pikah Kasau (Pangu, Manus Regional);  
 Mr Sinake Giregire (United Party, Daulo Open);  
 Mr Stanis ToLiman (People's Progress Party, Bogia Open);  
 Mr Tei Abal (United Party, Wabag Open); and  
 Mr Toni Ila (Pangu, Lae Open).

#### POLITICAL EDUCATION

*The Council notes the intention of the Government, as expressed by the Chief Minister, to intensify political education programmes. The Council also notes that according to the Chief Minister, the programme will concentrate on explaining the working of the political system in Papua New Guinea, how it responds to the wishes of the people and the promotion of national unity.*

*The Council commends the Administration for its efforts in regard to political education and welcomes the intentions of the new Government in this regard. The Council particularly welcomes the establishment of a political education committee to co-ordinate the activities of all groups involved in promoting political awareness throughout Papua New Guinea.*

*The Council notes, however, that although the programme of political education has had a considerable impact, the 1972 Visiting Mission has found that basic concepts such as self-government and independence were not clear to many people, including some candidates standing for election. Considerable effort will still be required before a thorough understanding of the basic precepts of the political process is achieved throughout the country. The Council recalls its recommendation, made at the thirty-eighth session, that the expatriate community should be included in the Administration's programme of political education and expresses the hope that this important aspect will not be overlooked.*

The Papua New Guinea Government has assumed the planning and direction of the political education programme. The function is being carried out by the Government Liaison Branch of the Office of the Chief Minister. In a statement to the House of Assembly on 23 November 1972, the Chief Minister said that a revised political education programme would attempt to establish a national communication network allowing a two-way flow of information between the people and the Government. Clarifying the issues of self government and independence and encouraging national unity were present aims of the Programme. Various competitions and National Committee celebrations organised by the Political Education Committee have worked towards this end.

The Chief Minister said that for the remainder of 1972 and for most of 1973 it was planned that the Office of the Chief Minister would support the task of the Constitutional Planning Committee in consulting the people by introducing selected constitutional concepts and encouraging the people to express their views.

Although the Political Education Programme itself and the work of the Constitutional Planning Committee are mainly directed towards Papua New Guineans, the Papua New Guinea Government is also involving expatriate residents in Papua New Guinea in their activities.

#### POLITICAL PARTIES

*The Council recalls that at its thirty-eighth session it noted the opinion of the 1971 Visiting Mission that the lack of political parties with a solid nation-wide base was a source of weakness in the House of Assembly. The Council notes from the report of the 1972 Visiting Mission and from the statements of the Special Advisers that the number of political parties operating in the Territory has markedly increased since the thirty-eighth session and that two main parties, the Pangu Party and the United Party, although drawing the bulk of their adherents from the coast and from the Highlands respectively, also enjoy support from elsewhere in Papua New Guinea. In this respect, the Council has had its attention drawn to the fact that the Ministry formed by the National Coalition in the House of Assembly includes representatives from all but 3 of the main population groups of Papua New Guinea.*

*The Council welcomes the recent emergence of more political parties and the broadening of their bases of support. Although the Council hopes that the Administration will continue to encourage political parties to develop on a truly national basis, it considers that the onus for this rests primarily on the parties themselves. The Council notes from the report of the Visiting Mission that radio time was made available during the election campaign to representatives of three of the main parties. The Council hopes that sympathetic consideration will be given by the new Government to requests from political parties, including those not represented in the National Coalition, to make periodic broadcasts in support of their policies.*

The Administering Authority agrees that the impetus for developing political parties should come from the parties and the people of Papua New Guinea themselves.

The National Coalition Government is considering the problems associated with the provision of increased broadcasting facilities.

#### HOUSE OF ASSEMBLY ELECTIONS

*The Council, in its resolution 2158 (XXXIX) adopted on 28 June 1972, has expressed its appreciation for the work achieved by the Visiting Mission.*

*The Council notes the view of the Visiting Mission that the conduct of the elections by the Administering Authority was comprehensive, thorough and fair and commends all concerned in the administration of the elections on the success of their efforts. The Council wishes particularly to commend the part played by the Chief Electoral Officer of Papua New Guinea.*

*The Council also notes with interest the various criticisms and suggestions made by the Visiting Mission concerning the conduct of the 1972 elections. The Council notes the statement made by the Chief Electoral Officer indicating his satisfaction with the report and welcomes his assurance that he regards the criticisms as constructive and fair and will give careful consideration to recommending to his Minister the introduction into the House of Assembly of any necessary consequential legislation.*

Mr Simon Kaumi, who was Chief Electoral Officer at the time of the 1972 elections has subsequently served as Chairman of the Highland Famine Appeal Committee and as Acting Secretary and Acting Deputy Secretary of

the Department of Social Development and Home Affairs. His time has been heavily committed in these roles, but it is expected that his report on the 1972 elections will be published soon.

#### JUDICIARY

*The Council, recalling the opinion of the 1971 Visiting Mission that the programme of localisation of the judiciary needed to be speeded up, notes with approval the increase, since the thirty-eighth session, both in the number of indigenous magistrates in the field and in the number of trainees now undertaking instruction.*

*The Council notes with interest that an examination by the Department of External Territories and by the Administration of the jurisdiction, supervision and localisation of the court system in Papua New Guinea has been completed and is now due for consideration by the Administrator's Executive Council. The Council also notes that the report of a working party on the establishment of an indigenous career magistracy has also been completed and trusts that its recommendations will be studied and, if appropriate, implemented as a matter of priority.*

*The Council also notes that the question of establishing a system of village justices to settle disputes at a lower level than the present system of local courts is under review and that the views of the people of Papua New Guinea are being canvassed on this proposal. The Council looks forward to learning the result of this review at its fortieth session.*

As at 1 February 1973 there were 54 Papua New Guinean Magistrates and 16 Papua New Guinean Assistant Magistrates. Further training courses were expected to commence very shortly.

A paper on arrangements for the control and progressive localisation of Magistrates and other judicial officers (other than Judges of the Supreme Court) was presented to the House of Assembly on 27 June 1972. The paper proposed the establishment of a career Magisterial service to facilitate supervision of localisation of the Magistracy. These proposals are under consideration by, inter alia, the Constitutional Planning Committee, which has been charged with making recommendations in relation to the judicial system in Papua New Guinea's Self-Government Constitution. It is expected that legislation revising the Lower Court system in Papua New Guinea will be introduced into the House of Assembly during 1973.

A paper proposing the establishment of a system of Village Courts composed of respected but untrained village leaders to settle village disputes was presented to the House of Assembly on 21 September 1972. The proposals followed a survey of information among Papua New Guineans throughout the country that found almost unanimous support for the concept of village court systems. It is expected that legislation to give effect to the proposals will be introduced early in 1973.

## LOCAL GOVERNMENT

*The Council notes with approval that more local government councils have been established since its thirty-eighth session and that these now cover 92 per cent of the population. The Council, appreciating that progress in covering the remainder of the Territory will of necessity be slower than that achieved in the initial stages, notes that it remains the intention of the Administration to extend councils into all areas as soon as practicable.*

*The Council notes with interest the preparation for the establishment of area authorities and further special purpose authorities which will take over functions previously performed by the district advisory councils together with additional powers delegated to them by local government councils. The Council notes with satisfaction that the primary purpose of the establishment of these bodies is to enable greater participation by the people of the Territory in the affairs of government at the district level. The Council shares the opinion of the Administering Authority that these councils will perform some of the functions previously exercised by local government councils in a more efficient and economical manner.*

*The Council welcomes the information given to it by the Special Representative regarding the improvement in the situation on the Gazelle Peninsula and expresses the hope that the Tolai people will speedily find a lasting solution to the deep-rooted obstacles which have recently inhibited the operations of the local council system in the area. In this respect, the Council welcomes the decision by the representatives of the Mataungan Association to work with the National Coalition as part of the Government of the whole Territory, in contrast with their previous inclination towards a separate status for the Gazelle Peninsula.*

By 1 February 1973 Area Authorities had been established for the Chimbu, Manus, New Ireland, Northern, Southern Highlands, and Western Districts. The Area Authority for the Western District is known as 'Fly River Area Authority'.

The search for solutions to the problems of the Tolai people was one of the subjects of greatest concern to the new Papua New Guinea Government in 1972. Neither the Administering Authority nor the Papua New Guinea Government claims to have the answers to all these problems. The Papua New Guinea Government has sought to ascertain the demands and aspirations of the Tolai people and to translate them into a comprehensive and workable scheme of government. A Working Party appointed by the Chief Minister conducted extensive discussions with a wide cross section of Tolai leaders for this purpose. As an interim measure the Papua New Guinea Government introduced into the House of Assembly on 29 September 1972 the Gazelle Peninsula Affairs (Temporary Provisions) Bill. This provided for the winding up of the Gazelle Peninsula Local Government Council and the transfer of its assets and liabilities to a trust consisting of representatives of the Warkurai Nigunan, the institutional arm of the Mataungan Association, the pro-Council groups, and the Warbete Kivung, which has been opposed to Councils of all kinds.

Following further consultations between the Papua New Guinea Government and the Tolai people, a new Gazelle Peninsula (Temporary Provisions) Bill was introduced into the House on 27 November 1972. In addition to the measures provided for by the first Bill, the new Bill recognised 3 main groups, referring to each by name. These are the Warkurai Nigunan, the Greater Toma Council and the Warbete Kivung.

The Bill enables these recognised groups to participate, under the law, in the administration of the Gazelle Peninsula, carrying out their own local projects. There was provision in the Bill for the Administrator's Executive Council to grant further powers similar to those provided for in the Local Government Ordinance, on request. In speaking on the Bill, the Chief Minister expressed the hope that by co-operating to manage common assets the groups would overcome their mutual feelings and suspicion and mistrust.

The Bill was adjourned until the March 1973 meeting of the House of Assembly.

PUBLIC SERVICE: TRAINING AND  
APPOINTMENT OF INDIGENOUS  
PERSONS FOR POSITIONS OF  
RESPONSIBILITY IN THE  
ADMINISTRATION

*At its thirty-eighth session, the Council stated that it would welcome a report on the Administration's efforts to give localisation a new impetus and accordingly notes with approval the efforts that the Administering Authority has made. In this connection, the Council notes the White Paper on Accelerated Localisation and Training, the new functions of the Australian School of Pacific Administration and the provisions of the Senior Executives Programme and the Commonwealth Training Scheme. The Council also welcomes steps taken by the Administering Authority to prepare Papuans and New Guineans in Foreign service work and notes that the Australian Department of Foreign Affairs is assisting the Administration to build up an embryonic indigenous foreign service preparatory to independence.*

*The Council also recalls that at its thirty-eighth session it agreed with the views of the 1971 Visiting Mission that there is an urgent need to establish a clear programme for the retention of expatriates with special skills and for adequate compensation for those displaced. The Council notes from the statement of the Special Representative the difficulties which have prevented the establishment of an Australian Service for Overseas Co-operation and that no equivalent scheme satisfactory to the Public Service Association has yet emerged. The Council looks forward to hearing at its fortieth session that this problem, which may have an inhibiting effect on the localisation of the public service, has been resolved to the satisfaction of all concerned.*

*The Council also notes from the statement of one of the Special Advisers that there is a feeling in Papua New Guinea that the filling of posts in the public service should be on the basis of an equitable geographical distribution rather than on merit. The Council understands that a committee has been established to look into this question and again looks forward to learning of developments at its next session.*

On 3 August 1972 the Minister of State for External Territories announced the appointment of an independent consultant to advise both the Minister for External Territories and the Chief Minister of Papua New Guinea on

future arrangements appropriate now and in the future for the security of overseas officers. On 27 October it was announced that both the Australian and Papua New Guinea Governments had accepted the report in principle and, with minor exceptions, the whole of the recommendations. The decision has been very well received by both overseas and local officers and there is every reason to expect that the arrangements now provided will encourage those officers with special skills to continue to serve in Papua New Guinea for as long as they are needed. The provision of further staff from Australia, if desired, will also be facilitated.

One of the main recommendations accepted by the 2 Governments is that all overseas officers who have been appointed or engaged by the Australian Government up to the date its responsibility for the Papua New Guinea Public Service is transferred to the Papua New Guinea Government, will be deemed to be employees of the Australian Government and will have their salaries, retirement benefits and any compensation for loss of salary paid by the Australian Government. Another recommendation accepted by both Governments was that the proposal to establish an Australian Service for Overseas Co-operation should not be proceeded with.

The report of a committee of officials on arrangements appropriate to a National Public Service for Papua New Guinea is under consideration by the Papua New Guinea and Australian Governments and the Papua New Guinea Public Service Board. In a statement made on 22 September 1972 the Chief Minister said, in relation to a demand that senior appointments should be made on the basis of equality to all areas without regard to qualifications, that he could not agree with anyone who wanted to create artificial divisions in the country by appointing men to top positions on a racial basis.

The Papua New Government, with assistance from the Administering Authority, is increasing the emphasis upon the participation of Papua New Guineans in the economic development of Papua New Guinea, as described in parts VI and VII of this Report. Attention is drawn to the measures taken to restrict licensing of certain retail trades and transport services described in Chapter 2 of Part VI of this Report, to the provisions for restricting minor Public Works tenders to Papua New Guinea entrepreneurs and the increases in the amounts of Public Works

contracting by Papua New Guineans described in Chapter 11 or Part VI of this Report, and to the Indigenous Training Incentive Scheme and the Practical Training Scheme for Papuans and New Guineans in Australia, together with the *New Employment (Training and Regulation) Ordinance 1971* described in Part VII of this Report. The Administration's Technical Education and Adult Education programmes to improve the skill of Papua New Guineans are described in Chapters 4 and 7 of Part VIII of this Report.

## C. ECONOMIC ADVANCEMENT

### GENERAL

*The Council notes with interest that the Administering Authority, in preparing a second five-year economic plan for the period 1973-1978, is receiving the assistance of 4 experts from the United Nations Development Programme (UNDP) to advise on broad strategy. In this connexion, the Council would appreciate receiving at its next session a report on the achievements and shortcomings of the first five-year plan for economic development.*

Each year since the 5-year development programme was adopted in 1968, a statement has been presented to the House of Assembly with the annual budget proposals outlining progress made with the implementation of the programme in the preceding year. In 1971, a more detailed review entitled 'The Development Programme Reviewed', which incorporated a number of revisions to the programme, was presented to the House. These revisions were necessary to take account of developments which could not be adequately foreseen when the original programme was prepared and which were of great significance for the future course of economic development in Papua New Guinea. The most important of these developments was, of course, the Bougainville Copper Project.

Progress in the implementation of the programme has varied as between sectors—in some sectors results have been ahead of or in line with targets laid down in the original programme; in other sectors there have been shortfalls. A comparison of results with targets for each of the major productive sectors is outlined below:

#### (i) Agriculture

New plantings of major tree crops fell far short of targets. Plantings of rubber were only half the original target in the first 2

years of the programme; plantings of copra fell short of target by about one-third in that time. In the estate sector, the changing economic climate has made growers in some parts of the country reluctant to make the investments needed for improved efficiency. In the indigenous sector, competition between crops and from alternative avenues of employment such as mining has imposed constraints on the expansion of some crops in some areas. Disputes over land ownership have continued to restrain development, particularly at village level.

Production of copra and cocoa has been consistently in line with targets though there was a large shortfall in production of copra in 1971-72. Production of rubber on the other hand was almost 25 per cent below target over the 4 years to 1971-72. Production of coffee, for which no targets were set, has expanded steadily throughout the programme period.

The development of the tea industry is also behind the original target. Papua New Guinean tea development has been limited by the shortage of land suitable for smallholder schemes and by the reluctance of village people to grow tea in preference to other crops and livestock.

Oil palm production on the other hand commenced during 1971-72, ahead of the original programme date. Plantings of palm over the 3 years 1969-70 to 1971-72 were 12,700 acres compared with the target of 11,200 acres.

#### (ii) Livestock and Fisheries

Cattle numbers have been below programme targets (106,000 head in 1971-72 compared with the original target of over 120,000). It has not been possible to meet the demand for cattle by Papua New Guineans from government stations. The continued quarantine on the Baiyer River Station due to Brucellosis has been a major factor in the shortfall of the required number of breeders.

The early years of the development programme saw a very rapid increase in activity in the fishing industry, which was only in its infancy when the original programme was being prepared. The value of production of marine products in 1971-72 was \$5.2m. This was somewhat lower than expected for that year as adverse weather and poor tuna catches late in 1971 resulted in considerable contraction of fishing effort and the withdrawal of some tuna fishing fleets.

### *(iii) Forestry*

Log production during the first 3 years of the programme was some 21 per cent short of the original target. The industry was seriously set back in 1968 when the major overseas market ceased buying logs. The market improved substantially in 1969-70, but was again affected by a slowdown in the Japanese market in 1971-72.

### *(iv) Mining*

Mining output received a new momentum in 1971-72 from the commencement of production by Bougainville Copper Pty Ltd on 1 April 1972, several months ahead of schedule. As a result programme estimates for 1971-72 were greatly exceeded.

### *(v) Manufacturing*

With the exception of the timber processing industries, output in all sectors of manufacturing has exceeded targets in all years since 1968-69.

A large number of new manufacturing industries has been established during the programme period.

### *(vi) Electricity*

In terms of both installed capacity and energy generated, electricity output has been 5-10 per cent short of programme targets each year since 1969-1970.

### *(vii) Tourism*

The volume of tourist traffic has been generally above the original programme targets and was only 1,300 short of the revised higher target for 1971-72 when there were 45,300 short term visitors to Papua New Guinea.

### *(viii) Manpower, Education and Health*

There have been continuing shortfalls in the supply of indigenous skilled manpower. Shortfalls in the supply of high level local manpower have resulted from a shortage of school leavers of adequate standards to undertake tertiary studies. Also, wastage rates have been higher than anticipated in some courses.

There have also been some shortfalls in the malaria eradication and TB control programme but the number of people examined under the leprosy control programme and the expansion of general hospitals has been in line with targets.

## INDIGENOUS PARTICIPATION

*Once again the Council wishes to emphasise the importance of increasing the amount of indigenous participation in the economic advancement of Papua New Guinea. The Council hopes that the Investment Corporation will make rapid progress toward its goal of providing indigenous equity participation in major foreign enterprises operating there. In this connexion, the Council notes with approval the purchase of a 51 per cent equity by the corporation in a successful enterprise during the past year.*

*The Council notes with approval that for the second year in succession loans by the Papua New Guinea Development Bank to indigenous persons exceeded in value those made to non-indigenous and joint ventures combined. The Council wishes to underscore the importance it attaches to ensuring that programmes to encourage overseas investment for development purposes are combined with measures to assure the greatest possible participation of the indigenous population in economic development.*

Progress has been made with localisation programmes, particularly in the Public Service. The area of opportunity for Papua New Guineans in the private sector was extended by the introduction of systems of preferential tendering, restrictions on expatriate employment and controls over licensing in retail trading and the operation of passenger motor vehicles. Increased numbers of Papua New Guineans went overseas for training in Australia and other countries under both government and private sponsorship. Considerable progress was made by both the Development Bank and the Investment Corporation in securing increased local involvement and national ownership of business enterprises.

The Government has introduced a localisation scheme which will have far-reaching and rapid effects on the selection and advancement of suitable local officers in the Public Service. The scheme combines special selection procedures to identify officers suitable for advancement with formal and informal training opportunities and special promotion procedures to guarantee the advancement of able local officers.

In the private sector, there is increasing recognition of the need for localisation. To encourage localisation in the private sector, the Government has introduced the Indigenous Training Incentive Scheme which provides subsidies to firms undertaking training

for Papua New Guinean employees. Further opportunities are available under the Practical Training Scheme, which is open to private as well as public employers and provides traineeships in Australia in fields where training opportunities do not exist in Papua New Guinea.

Legislation has recently been introduced to restrict entry of expatriates to certain occupations. It is intended that the provisions of the legislation will be progressively expanded to cover higher level occupations as local manpower becomes available.

To enhance the prospects of urban unskilled unemployed manpower obtaining employment, a programme of adult education classes and sub-trades training is being undertaken.

### PUBLIC FINANCE

*The Council notes with interest that the Government of Papua New Guinea is contemplating a comprehensive revision of the present tax structure. In accordance with the recommendation it made at its thirty-eighth session, the Council expects that the elected representatives of the people of Papua New Guinea will play a decisive role in shaping this important element of fiscal policy.*

The Administering Authority is striving to encourage the development of financial experience in the National Coalition Government. The Minister for Finance was actively engaged, together with other members of his Government, in the preparation of the latest Budget. The comprehensive revision of the tax structure of Papua New Guinea has not yet been completed.

### AGRICULTURE

*In view of the forthcoming entry of the United Kingdom, a principal purchaser of Papua New Guinea's agricultural products, into the European Economic Community (EEC), the Council welcomes the steps taken by the Administering Authority to safeguard Papua New Guinea's traditional overseas markets for its agricultural products. The Council is nevertheless concerned with the Territory's over-dependence on the export of a few agricultural products as a source of foreign exchange. The dangers of this dependence were dramatically illustrated during the past year, since falling prices for its agricultural exports led to a serious downswing in the*

*economy. The Council hopes that the Government of Papua New Guinea will give careful consideration to the formulation of a comprehensive and realistic programme aimed at increasing and diversifying agricultural production and related to over-all development goals.*

The Government of Papua New Guinea is well aware of the need to diversify and increase agricultural production in order to dampen the adverse effects on the economy of falling world commodity prices. This is evidenced by the successful introduction in recent years of two new crops, tea and oil palm, which are expected to play a significant part in future agricultural production.

A second oil palm scheme has been commenced on the north coast of New Britain by a Japanese joint venture with the objective of marketing oil palm products in Japan. This is one example of the importance which will be placed on the Japanese and other Asian markets following the United Kingdom's entry into the EEC in 1973.

More recently, the Papua New Guinea Government has negotiated IDA credit of \$US5m for expansion of the indigenous sector of the cattle industry, as well as for pigs and poultry projects. Expansion of the livestock industries is seen as an important measure in conserving foreign exchange by replacing imports of meat.

Other import replacement crops being considered are sugar, tobacco, feed grains, fruit and vegetables, and rice. Significant crop diversification is however a complex problem in the difficult Papua New Guinea environment.

It is also relevant that with the rapid development of Papua New Guinea's fisheries, forest and mineral resources and secondary industries, so will that country's heavy dependence on agricultural exports be lessened.

### FISHERIES

*The Council notes that the results of a survey of skipjack tuna in Papua and New Guinean waters, undertaken by an Australian-Japanese venture, have been encouraging. The Council wishes, however, to emphasise the need to protect the traditional rights of indigenous fishermen in any commercial agreements with other nations and to provide for as much indigenous participation as possible in joint ventures under such agreements.*



The agreements negotiated with three Japanese joint venture fishing companies contain clauses safeguarding the traditional rights of Papua New Guinean fishermen and providing for maximum training and employment of Papua New Guineans. The agreements also contain options for equity participation by the Government of Papua New Guinea on behalf of the local people and the maximum processing of fish products in Papua New Guinea.

### FORESTRY

*Given the great economic potential of the country's vast timber reserves, the Council once again recommends that the Administering Authority examine with considerable care all projects involving development of these resources in order to provide a long-time source of export earnings for Papua New Guinea and to ensure from the beginning, considerable indigenous participation in forestry projects. In this connexion, the Council welcomes the agreement signed on 11 August 1971 by the then Minister for Forests and the Director of the Department of Forests with the Papua New Guinea Timber Co. Ltd of Tokyo, Japan, because it establishes an integrated timber industry based on the resources of the Gogol timber area in Madang District, provides for substantial equity to be taken up for the people of Papua New Guinea and specifically secures maximum participation by Papua New Guinea in the project.*

The Administering Authority shares the concern of the Trusteeship Council that the long-term interests of the inhabitants of the country should be adequately protected in the development of industries based on the forest resources. Therefore it has encouraged the National Coalition Government in measures by both governments to ensure substantial continuing export earnings, significant indigenous participation through employment, training and equity participation and the perpetuation of the resources.

### LAND TENURE

*The Council hopes that at its fortieth session it will be informed of some progress towards the solution of the longstanding land tenure problem. The Council also hopes that the new land legislation now being studied by the Government of Papua New Guinea will contribute to the successful resolution of land tenure disputes, help bring unused land into*

*productivity and fully protect the right of the people to their land. The Council notes with interest that the Chief Minister of the new National Coalition Government has stated in the House of Assembly that no changes in the land laws will be made until the new proposals have been carefully studied by a committee of inquiry.*

The ultimate and long-term objective of the Administering Authority and the Papua New Guinea Government is the introduction into Papua New Guinea of a single system of land-holding regulated by ordinance and providing for secure individual registered titles.

Four major bills to put this objective into effect were introduced into the House of Assembly in 1971, but were withdrawn when it became clear that their provisions were not fully understood.

The House of Assembly approved on 27 June 1972 that a Commission of Inquiry into land in Papua New Guinea be set up to investigate fully and report on the major land questions facing Papua New Guinea and recommend solutions. Its report will assist members of the House of Assembly in debating new legislation which will be introduced as a result of the enquiry.

### INDUSTRIES

*The Council notes that production at the Bougainville Copper Mine is now under way. The Council is reassured by the report of the Special Representative that the initial unsettling effects of this project have been overcome and that local vagrancy problems have been avoided by the repatriation of workers following the completion of the construction. The Council hopes that the Administering Authority will continue to exert every effort to ensure that this large enterprise does not create serious economic and social imbalances.*

*The Council notes with satisfaction the acceptance by the Administering Authority of most of the recommendations of the United Nations expert with regard to a co-ordinated programme for the development of small industry in Papua New Guinea. The Council notes that the United Nations expert has returned to the country in order to advise and assist in the implementation of these recommendations.*

*The Council notes the continuous annual increase in the number of tourists visiting Papua New Guinea and hopes that tourism as*



*an industry will be developed in a manner consistent with the wishes of the people.*

*The Council notes the continuing efforts of the Government, through its Department of Business Development, to encourage the growth of industrial and marketing co-operatives. The Council hopes that the Government will expand its efforts in this field as co-operatives offer great promise of significantly increasing indigenous participation in business enterprises.*

The Administering Authority, with the Papua New Guinea Government, wishes to assure the Council that both Governments share the Council's concern that the Bougainville Copper Project does not create serious economic and social imbalances.

The Papua New Guinea Government is conscious of the valuable assistance provided to it by the United Nations expert on the co-ordinated development of small industry in Papua New Guinea and is examining in close detail his recommendations.

Both the Governments are well aware that the tourist industry is a valuable source of funds for the country but at the same time have serious misgivings at the effect the industry has upon the people's culture and will certainly watch this with intense interest.

As the opportunity presents itself the Papua New Guinea Government with the active support of the Administering Authority will endeavour to foster the growth of industrial and marketing co-operatives. The efforts of both Governments and the assistance of the United Nations in this field have been recorded in both this and previous Reports.

#### TRANSPORT

*The Council notes with satisfaction that negotiations have been completed for a loan of \$US10m to finance further improvements in telecommunications.*

*The Council also notes with satisfaction the steady increase in the number of Papua New Guineans receiving training in the civil aviation field as pilots, mechanics and radio operators.*

As the opportunities present themselves the Papua New Guinea Government and the Administering Authority will propose and instigate further developments in the fields of transport and communications.

In agreement with the recommendations of a World Bank Mission, the charges for wharf

services and Papua New Guinea ports were increased early this year to make the traffic bear more of the economic cost of operations.

#### D. SOCIAL ADVANCEMENT

##### LABOUR

*The Council notes with interest that the recently established Minimum Wages Board is about to begin functioning and hopes that it will make every effort to provide for the payment of cash wages to rural workers.*

*The Council welcomes the implementation of the Employment (Training and Regulation) Ordinance which should help to ensure an increase in employment opportunities for Papua New Guineans by limiting the employment opportunities open to new immigrants from outside the Territory.*

*The Council notes with approval the steady growth in the number of indigenous wage and salary earners. The Council also notes, however, that the expansion in trade union membership has not kept pace with this growth in employment and hopes that the Administering Authority will ensure that this lag does not result from artificial barriers placed in the way of those Papua New Guineans attempting to organise and expand membership in workers' associations. The Council notes with concern an increase in labour disputes and an accompanying rise in tensions between management and labour and hopes that steps will be taken to encourage enterprises, particularly those which are owned by expatriates, to deal with free associations of workers in trying to resolve these disputes.*

*The Council notes with concern reports that juvenile delinquency is increasing in Papua New Guinea, primarily in urban areas, and notes with approval that the Department of Social Development and Home Affairs has included extensive plans for dealing with this problem in its five-year plan beginning in 1973. The Council hopes that the problem of youth gangs in particular can be dealt with as an urgent problem before these gangs develop more serious political and social overtones.*

The payment of all cash to workers in rural industries is provided for in the *Industrial Repatriations (Minimum Wages Board) Ordinance 1971* and the Department of Labour has taken measures through its district labour officers to ensure that employers comply with the provisions of the ordinance. The enforcement of the statute is not the responsibility of the Minimum Wages Board.

The Employment (Training and Regulation) Ordinance was brought into effect on 2 November 1972. The ordinance provides that an employer may not employ an overseas person who arrived in Papua New Guinea after 1 May 1972 in a work category that has been declared prohibited. An employer may not employ such a person in a work category that has been declared restricted under the ordinance without the required approval. Employment of such overseas persons in restricted categories is subject to conditions (e.g. training of Papua New Guineans to replace the overseas employees) and is for limited duration.

No barriers are or would be placed in the way of Papua New Guineans seeking to join or form trade unions in accordance with the provision of the Industrial Organisations Ordinance. A Bureau of Industrial Organisations has been established by statute to foster the development of organisations of employers and employees within Papua New Guinea. A tripartite board is responsible for the management of the Bureau and the development of its activities.

#### PUBLIC HEALTH

*The Council notes with approval the steady expansion in health facilities provided by the Administering Authority to the people of Papua New Guinea. The Council also notes with approval WHO programmes of assistance in the field of health education as well as dental, nursing and pharmaceutical training. The Council hopes that WHO will continue its activities in these fields, including the granting of scholarships to indigenous trainees. The Council welcomes continued visits by regional health teams devoted to combating communicable diseases.*

Health is a field in which the Coalition Government has complete authority.

In the period under review Papua New Guinea became an Associate Member of the WHO. The Papua New Guinea authorities are making full use of WHO advice and assistance in many health fields.

#### HOUSING

*The Council notes the Special Adviser's remarks concerning the continuing high demand for housing on the part of public servants.*

*The Council also notes with concern that squatter settlements around urban areas are becoming an increasingly serious social*

*problem. The Council hopes that the development programmes will encompass not only industrial development and housing construction but will also include community projects in rural areas aimed at reducing migration to urban areas.*

With the limited resources of Papua New Guinea it is not expected that the housing shortage will be overcome for some considerable time. However, the Coalition Government is conscious of the social factors requiring a solution to the problem and is endeavouring by the provision of low-and-minimum covenant housing to overcome its problem.

The squatter problem associated with the urban drift of the population is causing deep concern to the Coalition Government. The Government is considering every possible avenue which it might be able to use to overcome the problem but like other countries throughout the world, is not finding this easy.

A recent statement by the Chief Minister on development strategy acknowledges—that 'even if there is very fast urban, industrial and mining development, the bulk of the people will continue to live and work in the country', and recognises that 'the programme should provide for large scale development of the rural areas. It would be unrealistic to expect however, that the drift of people to the towns will be halted because of measures to improve living standards in rural areas of Papua New Guinea. This would be contrary to experience throughout the developing world'.

#### E. EDUCATIONAL ADVANCEMENT

*The Council reaffirms its view that education will play a vital role not only in developing a sense of national unity in Papua New Guinea, but also in providing the human resources upon which the country will have to rely as it moves toward independence. The Council also believes that the accelerated pace of change requires an equally rapid increase in the total number of teachers, students and schools. In this connection, since the Administering Authority has noted its inability to recruit sufficient teachers from among the indigenous population, the Government of Papua New Guinea should continue to recruit teachers from outside the country. The Council looks forward to hearing at its fortieth session the outcome of the recent tour of south-east Asian countries by a delegation, including the Teaching Service Commissioner, to*

examine the possibility of recruiting secondary school teachers from that area.

The Council notes that the Government intends to open a new senior high school every two years. In view of the Territory's increasing need for indigenous personnel with advanced skills, the Government, in the Council's view, should give priority to the establishment of a greater number of secondary vocational schools. The Council also notes that the Government of Papua New Guinea is considering a recommendation to develop further facilities for secondary school teacher training. In view of the priority the Council attaches to secondary education, the Council hopes that the Government will give this recommendation rapid and favourable consideration.

The delegation, consisting of the Teaching Service Commissioner and a member of the Public Service Board visited countries in South-East Asia to investigate the possibility of recruiting 'hard-to-get' categories of staff. Their report was examined by the Government and it was considered that this avenue should not be pursued at this time.

The Papua New Guinea Minister for Education has indicated the need for greater emphasis for community-oriented education which would stress learning skills useful for life in the community.

The Goroka Teacher's College is currently producing a steady stream of secondary teachers. In 1973 the output is expected to be of the order of 100 graduates. Proposals for additional secondary teacher-training facilities are being considered and will be referred to the Higher Education Commission which will probably be established in the next few months. Until such time as Papua New Guinea is self-sufficient in regard to teaching staff, Australia will continue to assist in the recruitment of teachers.

#### F. ESTABLISHMENT OF INTER-MEDIATE TARGET DATES AND FINAL TIME-LIMIT FOR THE ATTAINMENT OF SELF-GOVERNMENT AND INDEPENDENCE

The Council has already noted with satisfaction the election of an almost entirely indigenous House of Assembly, as well as the establishment of an embryonic cabinet under a Chief Minister which includes ministers who

formulate and determine policy over a wide range of government activities and who are in practice accountable for their actions to the House of Assembly.

The Council has also noted that in accordance with the recommendations of the Select Committee on Constitutional Development, the Administering Authority has drawn up a program outlining the action which will have to be taken before a full measure of self-government can be achieved and which involves the progressive transfer to the Government of Papua New Guinea of many of those areas of government for which the Administering Authority still retains final responsibility.

Mindful of its mandate under the Charter and of the provisions of the Trusteeship Agreement, and bearing in mind the provisions of relevant General Assembly resolutions, including the Declaration on the Granting of Independence to Colonial Countries and Peoples, contained in resolution 1514 (XV) of 14 December 1960, and resolution 1541 (XV) of 15 December 1960, the Council seeks to ensure that the people of the Territory are brought to self-government as swiftly as feasible.

In this connection, the Council notes that the Administering Authority stands ready to discuss with the elected leaders of Papua New Guinea the programme, including the setting of target dates, for the attainment of full self-government based on the assumption that this will be achieved in the lifetime of the present House of Assembly. The Council also notes from statements of the Special Representative that in the view of the Administering Authority the initiative as to the speed with which this programme becomes effective lies with the Government of Papua New Guinea and with the House of Assembly. The Council is gratified to note that, according to the Minister for External Territories, the Australian Government has no intention of letting progress to self-government be impeded by the complicated nature of the matters which have yet to be resolved.

The Council also notes from the statement of the Special Adviser representing the Pangu Party that although the National Coalition, of which reflects the wishes of the new Government to consider the exact timing of self-government, his own party remains in favour of immediate self-government. The Council also notes in this respect that since assuming office

*the Territory's Chief Minister has said that it is the National Coalition as a whole and not the Pangu Party which will decide this question, but it is his intention that self-government will come within the life of the present House of Assembly.*

*The Council welcomes the eagerness of the National Coalition to exercise the inalienable right of the peoples of Papua New Guinea to self-determination and independence and notes with satisfaction the willingness of the Administering Authority to move at a pace which reflects the wishes of the new Government of Papua New Guinea. The Council hopes that, in determining the pace towards self-government and independence, the views of all sections of the people will be taken into consideration.*

*The Council has no doubt that, as a result of the forthcoming discussions between the*

*Administering Authority and the elected representatives of Papua New Guinea, progress will not only be made towards setting a specific date for the achievement of self-government but also towards the establishment of an approximate time-table for the achievement of independence. The Council fully appreciates, however, that it may not yet be possible to draw up a detailed timetable for independence and endorses the view of the Administering Authority that the wishes of the people of Papua New Guinea should be decisive in this respect.*

At its August-September 1972 meeting the House of Assembly voted to accept 1 December 1973 or as soon as possible thereafter as the date for full internal self-government. The proposed timing has been accepted by the Administering Authority and planning is proceeding to bring about self-government within that time scale.

## PART X. SUMMARY AND CONCLUSIONS

Further extensive changes in the field of political advancement have occurred during the year under review. Major changes in the House of Assembly were made by amending the Papua New Guinea Act prior to the commencement of the Third House of Assembly after the general election in February and March 1972. The membership of the House was increased from 94 to a maximum of 107 and a minimum of 104. The membership now consists of 82 persons elected to represent Open Electorates, 18 persons with educational qualifications elected to represent Regional Electorates, 4 official members appointed by the Governor-General on the nomination of the Administrator, and up to 3 nominated members appointed by the House.

The former system of Ministerial and Assistant Ministerial Members was replaced by a Ministry of up to 17 Ministers. The Administrator's Executive Council was also altered and now consists of the Administrator, 10 Ministers and 3 official members. Perhaps the most important change was the provision for the Deputy Chairman of the Council, elected by the Ministry from among their number. The position of Deputy Chairman was seen as one which could develop into the position of Chief Minister, a development which has in fact occurred.

All these changes followed on from recommendations made by the Select Committee on Constitutional Development set up by the Second House of Assembly and accepted by the Administering Authority in 1971.

Following the general election in February-March 1972 a National Coalition Government led by Mr Michael Somare, the Parliamentary leader of the Pangu Party, emerged. The Coalition, commanding a majority in the House, consists of the Pangu Party, the People's Progress Party, and the New Guinea National Party, the Mataungan Association, and a number of Independents. Mr Somare was elected Deputy Chairman of the Administrator's Executive Council, and has adopted the title of Chief Minister.

The year under review has seen the beginnings of the development of a cohesive coalition government. Arrangements approved by the Minister of State for External Territories in April 1972 allowed for fuller exercise of power by Papua New Guinea Ministers and outlined their responsibilities in connection with their Departments, the Administrator's Executive Council, and the House of Assembly. In June 1972, the Administrator delegated to the Ministers

many of his powers and functions in specified areas, enabling them to exercise many of the powers which were previously the Administrator's prerogative. Arrangements were made for talks in August 1972 between the Papua New Guinea Ministry and the Minister of State for External Territories to agree on the further transfer of powers to the Papua New Guinea Government. These were held, and agreement was reached on the transfer of a number of matters, which was subsequently approved by the House of Assembly.

Another major event was the announcement in June 1972 by the Chief Minister of the establishment of a Constitutional Planning Committee to make recommendations for a Constitution for full internal self-government in a united Papua New Guinea, with a view to eventual independence. The committee, made up of members of the House representative of the various regions of Papua New Guinea, was to invite submissions from interested persons and be served by its own executive, legal, secretarial and consultant staff.

In the same month the Chief Minister announced his Government's view that self-government should not occur before 1 December, 1973, but that it should come as soon as possible after that. Debate on this was adjourned until the August-September meeting of the House, when the House voted to accept the timing. The Administering Authority has accepted the timing, and planning is under way to bring about self-government within that time scale. Self-government will mean that the Administering Authority will retain final powers only in the matters of defence and external affairs, which will be exercised in the fullest consultation with the Government of Papua New Guinea.

Papua New Guinea's participation in international organisations continues to expand, by its becoming an associate member of WHO and by its financial dealings with the Asian Development Bank of which it is a member and the World Bank Group. The Third Meeting of the South Pacific Forum—the meeting of leaders of independent countries in the South Pacific—decided in Suva in September 1972, following a request from the Chief Minister, to invite Papua New Guinea to attend future Forum meetings as an observer until such time as it met the criterion for full

membership, namely attainment of 'nationhood'. There is in the South Pacific a growing regional awareness, and Papua New Guinean leaders see their country as being able to provide a bridge between the South Pacific and Southeast Asia.

In the field of defence, the formation of a Joint Force Headquarters was announced in February 1972 to replace the existing 3 service command headquarters. Given the size of the force Papua New Guinea is likely to require, the headquarters, with a Joint Force Commander is more practical than the present arrangement. Another important event was the foreshadowing in June 1972 by the Minister of State for Defence of the appointment of a Defence Spokesman in the House of Assembly. This position was assumed initially by the Chief Minister.

There was an increase in the incidence of civil disorder during 1971-72, requiring a more widespread and forceful use of the police force. Local Court cases involving offences of this type totalled 22,380, over 25 per cent more than in 1970-71. Most incidents were inter-tribal, arising from land, property, and family disputes, and are compounded by the 'pay-back' concept.

In August 1971, the East New Britain District Commissioner, Mr E. J. Emanuel was killed while attempting to settle a land dispute at Kabaira Plantation. The Chief Justice, sentencing 5 villagers to prison terms from 18 months to 14 years, said the villagers were frustrated because of their failure to regain possession of the land through recourse to legal processes which they did not really comprehend.

Civil disorder involving rival Tolai factions in the Gazelle Peninsula has generally lessened since the election of 3 Mataungan Association candidates to the House of Assembly in 1972. Professor R. F. Salisbury's report in August 1971 on local government, land, and economic development in the Gazelle concluded that the Tolai must solve their own problems, and the authorities can only help. Following discussions between the Tolai and the Papua New Guinea Government, legislation aiming at a compromise solution was introduced into the House of Assembly in November 1972.

Cargo cults were manifest during the year in the Sepik, the Highlands, Manus, New Ireland, New Britain and Bougainville. Although a cult caused some disruption to the

election in 1972 in the Sepik, public order was maintained during the campaign and election.

In the Police, localisation is now 100 per cent below commissioned rank, 31 per cent in the commissioned officers, and 95.5 per cent overall. During the August 1972 constitutional talks between the Minister of State for External Territories and the Papua New Guinea Ministry, it was agreed that a position of Ministerial Spokesman for Police should be created in the House of Assembly. The Chief Minister initially assumed responsibility for this position.

In the field of local government, area authorities were established and operating in 1972 in the Chimbu, Manus, New Ireland, Northern, Southern Highlands, and Western Districts. Area authorities cover a whole district, and are bodies on to which powers can be devolved to promote varying degrees of local autonomy, based on local needs and desires. Consultations between the Papua New Guinea Government and councils in other districts will continue in 1973 with a view to the establishment of additional area authorities.

Localisation in the Public Service has been given an impetus by the revised selection procedures which give preference in promotion to efficient local officers, while the rights of overseas officers are safeguarded. During the year the service was increased by the entry of approximately 1,600 Papua New Guineans, mainly school leavers. Approximately 45 per cent of students leaving secondary schools joined the Service, although this figure includes those selected for teacher training.

During the year 31 Papua New Guinea officers of the Public Service attended a Senior Executive Programme designed to prepare them to assume the responsibilities of senior office by the end of 1972. Other training schemes included 143 cadets and 38 free place holders studying at tertiary institutions, and 694 apprentices in Public Service departments. 141 Papua New Guinea officers travelled to Australia under the Commonwealth Practical Training Scheme, and 196 Papua New Guinea officers travelled overseas for training during the year.

Major Public Service reorganisations during the year were the creation of an Office of the Chief Minister, and the transfer of the Bureau of Statistics from the Department of Social Development and Home Affairs to the Office of Programming and Co-ordination.

In November 1971 the Minister of State for External Territories announced a new role for the Australian School of Pacific Administration: a centre for training Papua New Guineans in preparation for self-government and independence.

In the economic sector, the Papua New Guinea Development Bank approved 2,458 loans worth \$8.1m, compared with 2,048 worth \$4.2m in 1970-71. It was significant that loans to Papua New Guineans increased from \$2.4m in 1970-71 to \$4.0m, a 67 per cent increase. The average size of industrial loans to Papua New Guinea increased by 31 per cent to \$1,200, commercial loans by 103 per cent to \$3,054 and rural loans by 22 per cent to \$1,427. Although these increases point to the economic progress of Papua New Guinea, the acute shortage of entrepreneurial experience and skills is still a problem. The Bank devotes the larger part of its effort to introducing Papua New Guineans to the cash economy through agriculture and livestock production.

The Bank made further loans from IDA credit funds to smallholder settlers in West New Britain to develop oil palm blocks, bringing the Bank's investment in smallholder blocks for oil palm under IDA refinancing arrangements to a total of nearly \$3m.

In August 1971, a document entitled 'The Development Programme Reviewed' was tabled in the House of Assembly. The document took into account developments which could not be adequately foreseen when the 5-year development programme from 1968-69 to 1972-73 was prepared. Foremost among these was the Bougainville Copper Project. A new development programme from 1973-74 to 1977-78 is in preparation, and a complete review of development strategy is being undertaken. In the programme, emphasis will be laid on economic development at the district level, perhaps through the establishment of various district development corporations. The Papua New Guinea Government is continuing its studies of how best to meet its objectives.

During 1971-72 localisation in the private sector was extended by the introduction of systems of preferential tendering, restrictions on expatriate employment and controls over licensing in retail trading and the operation of passenger motor vehicles. Increased numbers of Papua New Guineans went overseas for training under private sponsorship.

The Investment Corporation of Papua New Guinea commenced operations in February 1972, with the objective of taking up equity on behalf of Papua New Guinean persons and organisations in major overseas investment projects in Papua New Guinea. Equity holdings have been acquired in Bougainville Copper Pty Ltd, New Britain Palm Oil Ltd, Burns Philp and Co. Ltd, and Commonwealth New Guinea Timbers Ltd.

Road construction carried out during the year included the extension of the road network from Port Moresby towards Bereina, and the continuation of the Sepik Highway towards Lumi. The latter will increase the area's economic development by providing road access to the coast for 35,000 people. Completion of the Southern Highlands Highway is expected in 1972-73, and will provide a link from the Southern Highlands to the Highlands Highway and then to the coast at Iae. Other means of communications continued to improve and significant expansion in Subscriber Trunk Dialling took place.

A Commission of Enquiry into Alcoholic Drink was appointed during the period under review, and its report has been published. The Commission was set up because it was recognised that excessive drinking is a cause of many urban social problems. The Commission reported that excessive drinking is a significant cause of many urban social problems. The Commission's Report is being studied.

As far as education in Papua New Guinea is concerned, about 35 per cent of 7 to 12

year old Papua New Guinean children now attend primary school, and high school places are available for about 10 per cent of secondary school aged children. Of the students completing a primary education, about half proceed to either secondary education or vocational training. A recent development to commence in 1973 will provide opportunities for those children not selected for secondary or vocational training by including secondary school topics at selected primary schools.

Proposals to better co-ordinate post-secondary education were contained in the report of the 1971 Committee of Inquiry into Higher Education. Following this the Papua New Guinea Government and the Administering Authority will set up an independent Higher Education Commission to advise on the finance and development of the University of Papua New Guinea and the Institute of Technology, as well as taking a progressively greater interest in the development of other institutions.

A United Nations Visiting Mission, at the invitation of the Administering Authority, visited Papua New Guinea to observe the elections for the House of Assembly in February and March 1972. The Mission reported that the conduct of the elections by the Administering Authority was comprehensive, thorough, and fair, and commended all concerned in the administration of the elections, particularly the Chief Electoral Officer, Mr Simon Kaumi, on the success of their efforts.

# STATISTICAL APPENDICES

## STATISTICAL ORGANISATION

The *Statistics Ordinance 1950–1969* provides for the appointment of a Statistician and for the collection and compilation of statistics of Papua New Guinea as directed by the Administrator. A Bureau of Statistics is established in the Administration and under the direction of the Statistician is responsible, generally, for statistics and statistical co-ordination. Statistics are compiled separately for Papua and New Guinea where relevant.

The notification (not compulsory) of births, deaths and marriages of members of both the indigenous and non-indigenous population is provided for under the *Civil Registration Ordinance 1963–1971*.

A continuing count of the indigenous people in areas under Administration control is undertaken by the Department of the Administrator. Officers of that Department visit individual villages and record vital statistics on a family group basis, including details of age, sex, relationships, births and deaths, migration and absentees from villages. This information is entered in village books, which are retained in the village, and is revised periodically during census patrols. It is also entered in a village population register which is maintained at each district headquarters. Figures for the enumerated and estimated population are given in Appendix I of this Report.

The *Census Ordinance 1947* provided for the taking of a census of the non-indigenous population of Papua New Guinea by the Commonwealth Statistician in conjunction with the census of the Commonwealth of Australia. Censuses were taken under this ordinance at 30 June 1947, 1954 and 1961.

The *Census (Papua and New Guinea) Ordinance 1966* provided for the taking of censuses of both indigenous and non-indigenous populations and censuses were carried out in June–July 1966 and July 1971 under this ordinance.

Provision is made in the *Local Government Ordinance 1963–1971* for local government councils to undertake the collection of census and other statistics. The collection of statistical data to supply administrative requirements in fields such as education, forestry, health, labour, mining and trade, is authorised under various ordinances, and collected by the relevant departments.

Statistical publications issued during the year comprised bulletins dealing with Oversea Trade (annual and monthly), Oversea Migration (annual and quarterly), New Motor Vehicle Registrations (monthly), Motor Vehicles on Register (annual), Production—Primary Industries (annual), Production—Secondary Industries (annual), Quarterly Summary of Statistics, Imports Cleared for Home Consumption (annual), Transport and Communications (annual), Finance—Taxation (annual), Private Overseas Investment (annual), Capital Expenditure by Private Businesses (annual), Retail Price Index (quarterly), Industrial Accidents (annual), Road Traffic Accidents (annual), Building Statistics (quarterly), Monthly Abstract of Statistics, Statistics from Religious Organisations (annual), and a bulletin providing statistics of Retail Trade.

Figures are rounded to the last significant figure shown. Due to rounding, components in a table may not add exactly to the total indicated.

Figures which are not available are indicated by the letters n.a.

Figures which are preliminary or subject to revision are indicated by the letter p, figures revised since previous issue are indicated by the letter r.

Where the letters p or r appear at the head of a column or order of a row of figures, the symbol applies to all figures in that column or row.

Unless otherwise stated, tables quote combined figures for Papua New Guinea.

## CONVERSION TABLE

Relationship between English units and their metric equivalents are:

### LENGTH:

|             |          |   |                    |
|-------------|----------|---|--------------------|
|             | 1 inch   | = | 2.5400 centimetres |
| 12 inches   | = 1 foot | = | .3048 metres       |
| 3 feet      | = 1 yard | = | .9144 metres       |
| 1,760 yards | = 1 mile | = | 1.6093 kilometres  |

### AREA:

|                    |                 |   |                          |
|--------------------|-----------------|---|--------------------------|
|                    | 1 square foot   | = | .0929 square metres      |
| 9 square feet      | = 1 square yard | = | .8361 square metres      |
| 4,840 square yards | = 1 acre        | = | .4047 hectares           |
| 640 acres          | = 1 square mile | = | 2.5900 square kilometres |

### VOLUME:

|                               |                         |   |                    |
|-------------------------------|-------------------------|---|--------------------|
|                               | 1 cubic foot            | = | .0283 cubic metres |
| 1 square foot by 1 inch thick | = 1 super foot (timber) | = | 0.024 cubic metres |

### CAPACITY:

|         |                     |   |               |
|---------|---------------------|---|---------------|
|         | 1 pint              | = | .5682 litres  |
| 8 pints | = 1 imperial gallon | = | 4.5460 litres |

### WEIGHT:

|                    |                          |   |                     |
|--------------------|--------------------------|---|---------------------|
|                    | 1 ounce troy (oz)        | = | 31.1035 grammes     |
|                    | 1 ounce avoirdupois (oz) | = | 28.3495 grammes     |
| 16 oz. avoirdupois | = 1 pound (lb)           | = | .4536 kilogrammes   |
| 100 lb             | = 1 cental               | = | 45.3592 kilogrammes |
| 112 lb             | = 1 hundredweight (cwt)  | = | 50.8023 kilogrammes |
| 2,000 lb           | = 1 short ton            | = | .9072 tonnes        |
| 20 cwt             | = 1 ton (long ton)       | = | 1.0160 tonnes       |



# STATISTICAL SUMMARY

## APPENDIX I. POPULATION

|  | 1967-68   | 1968-69   | 1969-70   | 1970-71   | 1971-72   |
|--|-----------|-----------|-----------|-----------|-----------|
| Papua—<br>Indigenous population .. .. .            | 598,825   | 609,784   | 640,064   | 671,384   | 686,618   |
| New Guinea—<br>Indigenous population .. .. .       | 1,670,807 | 1,702,280 | 1,772,744 | 1,795,602 | 1,845,264 |
| Papua New Guinea—<br>Indigenous population .. .. . | 2,269,632 | 2,321,064 | 2,412,808 | 2,466,986 | 2,531,882 |

## APPENDIX II. ADMINISTRATIVE STRUCTURE OF GOVERNMENT

|   | 1967-68   | 1968-69   | 1969-70   | 1970-71   | 1971-72   |
|---|-----------|-----------|-----------|-----------|-----------|
| Total Staff in Public Service of Papua New Guinea .. .. .   | 31,668    | 34,528    | 38,776    | 34,872    | 44,183    |
| Papua New Guinean village officials and councillors .. .. . | 8,831     | 8,196     | 7,495     | 7,610     | 6,954     |
| Local Government Councils—                                  |           |           |           |           |           |
| Number of councils .. .. .                                  | 142       | 142       | 145       | 153       | 159       |
| Number of councillors .. .. .                               | 4,089     | 4,005     | 4,153     | 4,282     | 4,243     |
| Population in council areas .. .. .                         | 1,858,564 | 1,960,779 | 2,050,232 | 2,217,614 | 8,248,174 |

## APPENDIX III. JUSTICE

|                                       | 1967-68 | 1968-69 | 1969-70 | 1970-71 | 1971-72 |
|---------------------------------------|---------|---------|---------|---------|---------|
| Supreme Court—                        |         |         |         |         |         |
| Number charged .. .. .                | 647     | 594     | 712     | 685     | 888     |
| Number convicted .. .. .              | 408     | 421     | 424     | 426     | 616     |
| Number discharged .. .. .             | 181     | 181     | 189     | 220     | 231     |
| Number nolle prosequi entered .. .. . | 58      | 55      | 99      | 29      | 41      |
| District Courts—                      |         |         |         |         |         |
| Charged .. .. .                       | 17,895  | 14,951  | 15,537  | 23,170  | 26,565  |
| Convicted .. .. .                     | 15,581  | 12,903  | 13,580  | 20,166  | 24,367  |
| Referred to Supreme Court .. .. .     | ..      | ..      | ..      | ..      | ..      |
| Local Courts—                         |         |         |         |         |         |
| Persons tried .. .. .                 | 29,304  | 33,101  | 33,623  | 46,146  | 61,939  |
| Persons convicted .. .. .             | 27,687  | 31,299  | 30,101  | 41,587  | 54,110  |

APPENDIX IV. PUBLIC FINANCE

|  | 1967-68     | 1968-69       | 1969-70       | 1970-71       | 1971-72       |
|--|-------------|---------------|---------------|---------------|---------------|
|  | \$          | \$            | \$            | \$            | \$            |
| Revenue from within the Territory .. ..                          | 49,900,236  | (a)55,136,914 | (s)72,442,220 | (a)83,365,734 | (a)95,253,381 |
| Grant by the Government of the Commonwealth of Australia .. .. . | 77,594,242  | 87,271,286    | 97,270,921    | 69,999,682    | 69,874,990    |
| Total Expenditure .. .. .  | 133,546,995 | 149,485,395   | 204,277,522   | 190,859,960   | 209,744,794   |
| Less amount chargeable to Loan Fund ..                           | 8,397,214   | 7,182,956     | 15,636,280    | 15,587,411    | 25,540,440    |
| Expenditure from Revenue .. .. .                                 | 125,149,781 | 142,302,493   | 188,641,242   | 175,272,549   | 184,204,354   |

(a) From 1 July 1968 refunds of revenue have been deducted from gross collections by items.

APPENDIX VII. COMMERCE AND TRADE

|                                     | 1969-70       | 1970-71     | 1971-72 |
|-------------------------------------|---------------|-------------|---------|
| Imports .. .. .                     | \$213,051,000 | 254,599,000 | n.a.    |
| Exports .. .. .                     | \$93,560,000  | 101,932,000 | n.a.    |
| Total trade .. .. .                 | \$306,611,000 | 356,531,000 | n.a.    |
| Number of local companies .. .. .   | 2,043         | 2,376       | 2,718   |
| Number of foreign companies .. .. . | 469           | 572         | 651     |
| Private overseas investment .. .. . | \$110,736,000 | n.a.        | n.a.    |
| Investment income payable abroad .. | \$21,541,000  | n.a.        | n.a.    |

APPENDIX VIII. AGRICULTURE

|                                   | 1967-68    | 1968-69    | 1969-70    | 1970-71 | 1971-72 |
|-----------------------------------|------------|------------|------------|---------|---------|
| Land Tenure—                      |            |            |            |         |         |
| Unalienated land (hectares) .. .. | 44,698,218 | 44,639,341 | 44,618,372 | n.a.    | n.a.    |
| Land alienated (hectares) .. .. . | 1,470,815  | 1,529,692  | 1,550,661  | n.a.    | n.a.    |
| Land Leases—                      |            |            |            |         |         |
| Number of leases .. .. .          | 13,563     | 15,338     | 19,063     | n.a.    | n.a.    |
| Area of leases (hectares) .. .. . | 324,217    | (a)335,711 | 357,604    | n.a.    | n.a.    |

(a) This figure includes an additional 'Town Sub-division' category in 1967-68 of 2 leases of total area 123 hectares.

APPENDIX XI. FORESTS

|  | 1967-68     | 1968-69    | 1969-70    | 1970-71     | 1971-72      |
|--|-------------|------------|------------|-------------|--------------|
|  | Hectares    | Hectares   | Hectares   | Hectares    | Hectares     |
| Silviculture operations—                   |             |            |            |             |              |
| Plantation area improved or regenerated .. | 1,191       | 1,919      | 1,191      | 1,191       | 1,191        |
| Area of plantation established .. .. .     | 7,760       | 9,048      | 10,375     | 11,008      | 12,132       |
| Areas under exploitation .. .. .           | 537,246     | n.a.       | n.a.       | 851,560     | 579,716      |
|  | Super feet  | Super feet | Super feet | Super feet  | Cubic metres |
| Timber harvested .. .. .                   | 175,584,253 | n.a.       | n.a.       | 294,600,000 | 869,660      |
| Sawn timber produced .. .. .               | 39,830,855  | n.a.       | n.a.       | 44,600,000  | 153,100      |

APPENDIX XII. MINERAL RESERVES

|   | 1967-68 | 1968-69 | 1969-70 | 1970-71 | 1971-72    |
|---|---------|---------|---------|---------|------------|
| Mineral areas held—hectares .. ..       | 3,139   | 3,803   | 8,772   | 11,003  | 17,168     |
| Number of mines .. ..                   | 431     | 469     | n.a.    | n.a.    | 434        |
| Number of workers in mining industry .. | 5,591   | 6,013   | n.a.    | 14,152  | 6,610      |
| Value of minerals produced .. \$        | 858,271 | 836,907 | 825,916 | 719,924 | 31,051,038 |

APPENDIX XIV. CO-OPERATIVES

|                                     | 1967-68   | 1968-69   | 1969-70   | 1970-71      | 1971-72   |
|-------------------------------------|-----------|-----------|-----------|--------------|-----------|
| Number of primary societies .. ..   | 312       | 316       | 329       | 332          | 340       |
| Total turnover .. .. \$             | 4,997,141 | 5,378,418 | 6,262,282 | (r)6,222,193 | 6,970,370 |
| Number of secondary societies .. .. | 14        | 14        | 14        | 17           | 16        |
| Total turnover .. .. \$             | 1,320,297 | 1,417,106 | 1,245,781 | (r)801,777   | 1,064,668 |

APPENDIX XXI. PENAL ORGANISATION

|  | 1967-68 | 1968-69 | 1969-70 | 1970-71 | 1971-72 |
|--|---------|---------|---------|---------|---------|
| Total number of persons committed to corrective institutions .. .. | 22,658  | 22,727  | 22,262  | 21,427  | 26,399  |

APPENDIX XXII. EDUCATION

|   | 1967-68 | 1968-69 | 1969-70 | 1970-71 | 1971-72 |
|---|---------|---------|---------|---------|---------|
| Number of Government schools .. ..      | 528     | 569     | 585     | 612     | 648     |
| Number of Government teachers .. ..     | 2,910   | 3,220   | 3,368   | 3,616   | 4,034   |
| Number of Government pupils .. ..       | 88,574  | 93,887  | 97,547  | 104,074 | 110,534 |
| Number of Non-Government schools .. ..  | 1,298   | 1,236   | 1,179   | 1,153   | 1,172   |
| Number of Non-Government teachers .. .. | 4,766   | 4,865   | 4,372   | 4,480   | 5,028   |
| Number of Non-Government pupils .. ..   | 140,147 | 141,621 | 142,804 | 148,194 | 149,451 |

APPENDIX XXV. RELIGIOUS MISSIONS

|  | 1967-68   | 1968-69   | 1969-70   | 1970-71   | 1971-72 |
|--|-----------|-----------|-----------|-----------|---------|
| Number of non-indigenous missionaries .. | n.a.      | 3,336     | 3,411     | 3,388     | n.a.    |
| Expenditure on health .. .. \$           | 2,707,000 | 2,894,000 | 3,005,000 | 1,969,000 | n.a.    |
| Expenditure on education .. .. \$        | 5,155,000 | 5,377,000 | 4,812,000 | 3,209,000 | n.a.    |

## APPENDIX XV. TRANSPORT AND COMMUNICATIONS

|   | 1967-68    | 1968-69    | 1969-70    | 1970-71    | 1971-72    |
|---|------------|------------|------------|------------|------------|
| Number of postal articles handled .. ..                         | 46,380,087 | 46,319,639 | 51,794,518 | 56,170,000 | 57,990,000 |
| Number of subscribers .. ..                                     | 6,764      | 9,175      | 10,571     | (P)11,709  | 13,313     |
| Number of telegraph stations .. ..                              | 1,077      | 1,491      | 1,545      | 1,686      | 1,759      |
| Number of telegraph messages handled ..                         | 620,996    | 680,294    | 784,803    | 856,844    | 888,705    |
| Number of aerodromes .. ..                                      | 377        | 377        | 406        | 414        | 424        |
| Mileage of vehicular roads .. ..                                | 7,379      | n.a.       | n.a.       | 7,568      | 15,327     |
| Total number of vessels from overseas entered and cleared .. .. | 1,249      | n.a.       | n.a.       | 1,241      | 2,237      |
| Tonnage of overseas vessels entered and cleared ..              | 2,446,000  | n.a.       | n.a.       | 2,211,910  | 3,712,137  |
| Tonnage of overseas cargo handled .. ..                         | 1,038,442  | 1,215,631  | 1,618,954  | 2,362,734  | n.a.       |
| Tonnage of inter-Territory cargo handled ..                     | n.a.       | n.a.       | n.a.       | 128,769    | n.a.       |
| Number of motor vehicle and motor-cycle registrations .. ..     | (a)20,696  | (a)25,469  | (a)29,236  | 34,667     | 38,163     |

(a) Figures are for calendar year.

## APPENDIX XVII. LABOUR

|   | 1967-68 | 1968-69 | 1969-70 | 1970-71 | 1971-72 |
|---|---------|---------|---------|---------|---------|
| Number of deaths due to occupational disease  | Nil     | Nil     | Nil     | Nil     | Nil     |
| Number of prosecutions for breaches of Native Employment Ordinance by employers ..                    | Nil     | Nil     | Nil     | 2       | Nil     |
| Number of prosecutions for breaches of Native Employment Ordinance by workers ..                      | Nil     | Nil     | Nil     | Nil     | Nil     |
| Number of breaches of Papua New Guinean Employees' agreements under Native Employment Ordinance .. .. | 522     | 522     | 1,079   | n.a.    | 1,762   |

## APPENDIX XIX. PUBLIC HEALTH

|   | 1967-68    | 1968-69 | 1969-70 | 1970-71 | 1971-72 |
|---|------------|---------|---------|---------|---------|
| Number of health services personnel(a) ..                   | 6,703      | 6,957   | n.a.    | n.a.    | 5,967   |
| Number of hospitals and clinics .. ..                       | 4,735      | n.a.    | n.a.    | 5,581   | 2,093*  |
| Number of in-patients treated in Government hospitals .. .. | 123,405    | 126,360 | n.a.    | 131,846 | 142,974 |
| of which were fatal .. ..                                   | 2,864      | 2,796   | n.a.    | 2,843   | 3,171   |
| Value of medical aid to missions .. .. \$                   | 447,593    | n.a.    | n.a.    | n.a.    | n.a.    |
| Total expenditure on health .. .. \$                        | 16,089,997 | n.a.    | n.a.    | n.a.    | n.a.    |

(a) Excludes non-medical personnel before 1969-70.

\* See footnote Table 2. Appendix XIX.

# APPENDIX I

## POPULATION

### 1. ENUMERATED INDIGENOUS POPULATION AT 30 JUNE 1972

#### Papua

| District and sub-district  | Children       |                |                | Adults         |                |                | Persons        |                |                | Estimated persons | Total          |
|----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------|----------------|
|                            | Male           | Female         | Total          | Male           | Female         | Total          | Male           | Female         | Total          |                   |                |
| <b>Western—</b>            |                |                |                |                |                |                |                |                |                |                   |                |
| Morehead ..                | 1,173          | 1,171          | 2,344          | 1,243          | 1,255          | 2,498          | 2,416          | 2,426          | 4,842          | ..                | 4,842          |
| Daru ..                    | 3,908          | 3,571          | 7,479          | 4,444          | 3,978          | 8,422          | 8,352          | 7,549          | 15,901         | ..                | 15,901         |
| Balimo ..                  | 4,265          | 3,915          | 8,180          | 4,276          | 4,450          | 8,726          | 8,541          | 8,365          | 16,906         | 150               | 17,056         |
| Kiunga ..                  | 4,332          | 3,745          | 8,077          | 5,352          | 4,581          | 9,933          | 9,684          | 8,326          | 18,010         | 75                | 18,085         |
| Nomad ..                   | 2,764          | 2,278          | 5,042          | 3,232          | 2,976          | 6,208          | 5,996          | 5,254          | 11,250         | 510               | 11,760         |
| <b>Total</b> ..            | <b>16,442</b>  | <b>14,680</b>  | <b>31,122</b>  | <b>18,547</b>  | <b>17,240</b>  | <b>35,787</b>  | <b>34,989</b>  | <b>31,920</b>  | <b>66,909</b>  | <b>735</b>        | <b>67,644</b>  |
| <b>Gulf—</b>               |                |                |                |                |                |                |                |                |                |                   |                |
| Kerema ..                  | 7,336          | 6,663          | 13,999         | 8,993          | 7,995          | 16,988         | 16,329         | 14,658         | 30,987         | ..                | 30,987         |
| Kikori ..                  | 3,518          | 3,211          | 6,729          | 6,268          | 5,186          | 11,454         | 9,786          | 8,397          | 18,183         | 150               | 18,333         |
| Malalaua ..                | 4,951          | 4,398          | 9,349          | 7,745          | 4,854          | 12,599         | 12,696         | 9,252          | 21,948         | ..                | 21,948         |
| <b>Total</b> ..            | <b>15,805</b>  | <b>14,272</b>  | <b>30,077</b>  | <b>23,006</b>  | <b>18,035</b>  | <b>41,041</b>  | <b>38,811</b>  | <b>32,307</b>  | <b>71,118</b>  | <b>150</b>        | <b>71,268</b>  |
| <b>Central—</b>            |                |                |                |                |                |                |                |                |                |                   |                |
| Port Moresby ..            | 3,681          | 3,420          | 7,101          | 3,817          | 3,128          | 6,945          | 7,498          | 6,548          | 14,046         | *                 | 65,034         |
| Rigo ..                    | 7,229          | 6,037          | 13,266         | 8,047          | 6,620          | 14,667         | 15,276         | 12,657         | 27,933         | ..                | 27,933         |
| Kairuku ..                 | 5,136          | 4,797          | 9,933          | 6,418          | 5,462          | 11,880         | 11,554         | 10,259         | 21,813         | ..                | 21,813         |
| Abau ..                    | 6,756          | 5,170          | 11,926         | 6,152          | 4,914          | 11,066         | 12,908         | 10,084         | 22,992         | ..                | 22,992         |
| Goilala ..                 | 5,281          | 5,126          | 10,407         | 10,183         | 8,559          | 18,742         | 15,464         | 13,685         | 29,149         | ..                | 29,149         |
| <b>Total</b> ..            | <b>28,083</b>  | <b>24,550</b>  | <b>52,633</b>  | <b>34,617</b>  | <b>28,683</b>  | <b>63,300</b>  | <b>62,700</b>  | <b>53,233</b>  | <b>115,933</b> | <b>50,988</b>     | <b>166,921</b> |
| <b>Milne Bay—</b>          |                |                |                |                |                |                |                |                |                |                   |                |
| Samarai ..                 | 2,288          | 2,152          | 4,440          | 3,287          | 2,650          | 5,937          | 5,575          | 4,802          | 10,377         | ..                | 10,377         |
| Alotau ..                  | 2,780          | 2,472          | 5,252          | 4,208          | 3,443          | 7,651          | 6,988          | 5,915          | 12,903         | ..                | 12,903         |
| Rabaraba ..                | 4,200          | 3,721          | 7,921          | 6,373          | 5,113          | 11,486         | 10,573         | 8,834          | 19,407         | ..                | 19,407         |
| Esa'Ala ..                 | 8,263          | 7,578          | 15,841         | 11,322         | 10,033         | 21,355         | 19,585         | 17,611         | 37,196         | ..                | 37,196         |
| Losuia ..                  | 3,973          | 3,509          | 7,482          | 5,226          | 4,389          | 9,615          | 9,199          | 7,898          | 17,097         | ..                | 17,097         |
| Misima ..                  | 3,334          | 3,051          | 6,385          | 4,258          | 3,588          | 7,846          | 7,592          | 6,639          | 14,231         | ..                | 14,231         |
| <b>Total</b> ..            | <b>24,838</b>  | <b>22,483</b>  | <b>47,321</b>  | <b>34,674</b>  | <b>29,216</b>  | <b>63,890</b>  | <b>59,512</b>  | <b>51,699</b>  | <b>111,211</b> | <b>..</b>         | <b>111,211</b> |
| <b>Southern Highlands—</b> |                |                |                |                |                |                |                |                |                |                   |                |
| Tari ..                    | 8,091          | 8,041          | 16,132         | 11,327         | 10,928         | 22,255         | 19,418         | 18,969         | 38,387         | ..                | 38,387         |
| Nipa ..                    | 8,547          | 8,510          | 17,057         | 11,078         | 11,011         | 22,089         | 19,625         | 19,521         | 39,146         | ..                | 39,146         |
| Kagua ..                   | 7,337          | 6,888          | 14,225         | 10,192         | 9,177          | 19,369         | 17,529         | 16,065         | 33,594         | ..                | 33,594         |
| Pangia ..                  | 4,442          | 3,900          | 8,342          | 5,579          | 4,610          | 10,189         | 10,021         | 8,510          | 18,531         | ..                | 18,531         |
| Jalibu ..                  | 4,638          | 4,483          | 9,121          | 6,370          | 5,911          | 12,281         | 11,008         | 10,394         | 21,402         | ..                | 21,402         |
| Mendi ..                   | 7,014          | 6,777          | 13,791         | 10,722         | 9,451          | 20,173         | 17,736         | 16,228         | 33,964         | ..                | 33,964         |
| Koroba ..                  | 4,841          | 4,591          | 9,432          | 6,018          | 6,185          | 12,203         | 10,859         | 10,776         | 21,635         | 220               | 21,855         |
| <b>Total</b> ..            | <b>44,910</b>  | <b>43,190</b>  | <b>88,100</b>  | <b>61,286</b>  | <b>57,273</b>  | <b>118,559</b> | <b>106,196</b> | <b>100,463</b> | <b>206,659</b> | <b>220</b>        | <b>206,879</b> |
| <b>Northern—</b>           |                |                |                |                |                |                |                |                |                |                   |                |
| Popondetta ..              | 10,325         | 9,898          | 20,223         | 13,194         | 10,597         | 23,791         | 23,519         | 20,495         | 44,014         | 700               | 44,714         |
| Kokoda ..                  | 2,040          | 1,984          | 4,024          | 2,647          | 2,055          | 4,702          | 4,687          | 4,039          | 8,726          | ..                | 8,726          |
| Tufi ..                    | 2,244          | 1,928          | 4,172          | 2,731          | 2,352          | 5,083          | 4,975          | 4,280          | 9,255          | ..                | 9,255          |
| <b>Total</b> ..            | <b>14,609</b>  | <b>13,810</b>  | <b>28,419</b>  | <b>18,572</b>  | <b>15,004</b>  | <b>33,576</b>  | <b>33,181</b>  | <b>28,814</b>  | <b>61,995</b>  | <b>700</b>        | <b>62,695</b>  |
| <b>Total Papua</b> ..      | <b>144,687</b> | <b>132,985</b> | <b>277,672</b> | <b>190,702</b> | <b>165,451</b> | <b>356,153</b> | <b>335,389</b> | <b>298,436</b> | <b>633,825</b> | <b>52,793</b>     | <b>686,618</b> |

\* Urban Port Moresby 31,436 (male), 19,552 (female).

ENUMERATED INDIGENOUS POPULATION AT 30 JUNE 1972—continued  
New Guinea

| District and sub-district | Children      |               |                | Adults         |               |                | Persons        |                |                | Estimated persons | Total          |
|---------------------------|---------------|---------------|----------------|----------------|---------------|----------------|----------------|----------------|----------------|-------------------|----------------|
|                           | Male          | Female        | Total          | Male           | Female        | Total          | Male           | Female         | Total          |                   |                |
| <b>East Sepik—</b>        |               |               |                |                |               |                |                |                |                |                   |                |
| Wewak .. ..               | 10,603        | 9,826         | 20,429         | 13,744         | 11,618        | 25,362         | 24,347         | 21,444         | 45,791         | 2,400             | 48,191         |
| Maprik .. ..              | 19,721        | 18,777        | 38,498         | 28,290         | 25,035        | 53,325         | 48,011         | 43,812         | 91,823         | ..                | 91,823         |
| Angoram .. ..             | 8,492         | 8,589         | 17,081         | 11,235         | 9,296         | 20,531         | 19,727         | 17,885         | 37,612         | ..                | 37,612         |
| Ambunti .. ..             | 6,313         | 5,978         | 12,291         | 7,759          | 6,987         | 14,746         | 14,072         | 12,965         | 27,037         | 2,556             | 29,593         |
| <b>Total</b> .. ..        | <b>45,129</b> | <b>43,170</b> | <b>88,299</b>  | <b>61,028</b>  | <b>52,936</b> | <b>113,964</b> | <b>106,157</b> | <b>96,106</b>  | <b>202,263</b> | <b>4,956</b>      | <b>207,219</b> |
| <b>West Sepik—</b>        |               |               |                |                |               |                |                |                |                |                   |                |
| Aitape .. ..              | 3,955         | 3,741         | 7,696          | 4,624          | 3,897         | 8,521          | 8,579          | 7,638          | 16,217         | ..                | 16,217         |
| Amanab .. ..              | 3,755         | 3,109         | 6,864          | 5,272          | 4,045         | 9,317          | 9,027          | 7,154          | 16,181         | 1,835             | 18,016         |
| Vanimo .. ..              | 1,571         | 1,590         | 3,161          | 1,984          | 1,672         | 3,656          | 3,555          | 3,262          | 6,817          | ..                | 6,817          |
| Telefomin .. ..           | 3,153         | 2,821         | 5,974          | 4,751          | 3,873         | 8,624          | 7,904          | 6,694          | 14,598         | 170               | 14,768         |
| Lumi .. ..                | 9,244         | 8,681         | 17,925         | 15,817         | 12,558        | 28,375         | 25,061         | 21,239         | 46,300         | ..                | 46,300         |
| <b>Total</b> .. ..        | <b>21,678</b> | <b>19,942</b> | <b>41,620</b>  | <b>32,448</b>  | <b>26,045</b> | <b>58,493</b>  | <b>54,126</b>  | <b>45,987</b>  | <b>100,113</b> | <b>2,005</b>      | <b>102,118</b> |
| <b>Western Highlands—</b> |               |               |                |                |               |                |                |                |                |                   |                |
| Mount Hagen .. ..         | 24,615        | 23,289        | 47,904         | 36,543         | 32,310        | 68,853         | 61,158         | 55,599         | 116,757        | ..                | 116,757        |
| Jimi .. ..                | 4,748         | 4,482         | 9,230          | 8,508          | 6,969         | 15,477         | 13,256         | 11,451         | 24,707         | ..                | 24,707         |
| Wapenamanda .. ..         | 6,776         | 6,174         | 12,950         | 9,172          | 8,113         | 17,285         | 15,948         | 14,287         | 30,235         | ..                | 30,235         |
| Wabag .. ..               | 12,153        | 11,517        | 23,670         | 18,127         | 15,581        | 33,708         | 30,280         | 27,098         | 57,378         | ..                | 57,378         |
| Lagaip .. ..              | 14,873        | 13,672        | 28,545         | 17,963         | 16,813        | 34,776         | 32,836         | 30,485         | 63,321         | ..                | 63,321         |
| Minj .. ..                | 8,752         | 8,331         | 17,083         | 13,572         | 12,820        | 26,392         | 22,324         | 21,151         | 43,475         | ..                | 43,475         |
| Lake Kopiago .. ..        | 2,027         | 1,823         | 3,850          | 2,634          | 2,315         | 4,949          | 4,661          | 4,138          | 8,799          | 100               | 8,899          |
| <b>Total</b> .. ..        | <b>73,944</b> | <b>69,288</b> | <b>143,232</b> | <b>106,519</b> | <b>94,921</b> | <b>201,440</b> | <b>180,463</b> | <b>164,209</b> | <b>344,672</b> | <b>100</b>        | <b>344,772</b> |
| <b>Eastern Highlands—</b> |               |               |                |                |               |                |                |                |                |                   |                |
| Goroka .. ..              | 12,731        | 12,210        | 24,941         | 20,901         | 18,413        | 39,314         | 33,632         | 30,623         | 64,255         | 12,628            | 76,883         |
| Kainantu .. ..            | 11,900        | 11,501        | 23,401         | 15,212         | 15,085        | 30,297         | 27,112         | 26,586         | 53,698         | 2,990             | 56,688         |
| Henganofi .. ..           | 7,665         | 7,429         | 15,094         | 10,830         | 9,625         | 20,455         | 18,495         | 17,054         | 35,549         | 194               | 35,743         |
| Lufa .. ..                | 6,673         | 6,409         | 13,082         | 8,619          | 8,095         | 16,714         | 15,292         | 14,504         | 29,796         | 200               | 29,996         |
| Okapa .. ..               | 10,362        | 10,014        | 20,376         | 14,487         | 11,204        | 25,691         | 24,849         | 21,218         | 46,067         | 460               | 46,527         |
| Wonenara .. ..            | 1,978         | 1,747         | 3,725          | 1,961          | 2,103         | 4,064          | 3,939          | 3,850          | 7,789          | 40                | 7,829          |
| <b>Total</b> .. ..        | <b>51,309</b> | <b>49,310</b> | <b>100,619</b> | <b>72,010</b>  | <b>64,525</b> | <b>136,535</b> | <b>123,319</b> | <b>113,835</b> | <b>237,154</b> | <b>16,512</b>     | <b>253,666</b> |
| <b>Chimbu—</b>            |               |               |                |                |               |                |                |                |                |                   |                |
| Kundiawa .. ..            | 12,594        | 11,926        | 24,520         | 21,458         | 17,566        | 39,024         | 34,052         | 29,492         | 63,544         | ..                | 63,544         |
| Chuave .. ..              | 5,486         | 5,162         | 10,648         | 11,346         | 9,700         | 21,046         | 16,832         | 14,862         | 31,694         | ..                | 31,694         |
| Kerowagi .. ..            | 6,111         | 5,778         | 11,889         | 11,172         | 9,047         | 20,219         | 17,283         | 14,825         | 32,108         | ..                | 32,108         |
| Gumine .. ..              | 7,886         | 7,478         | 15,364         | 13,942         | 11,189        | 25,131         | 21,828         | 18,667         | 40,495         | ..                | 40,495         |
| Gembogl .. ..             | 4,117         | 3,855         | 7,972          | 7,905          | 6,384         | 14,289         | 12,022         | 10,239         | 22,261         | ..                | 22,261         |
| <b>Total</b> .. ..        | <b>36,194</b> | <b>34,199</b> | <b>70,393</b>  | <b>65,823</b>  | <b>53,886</b> | <b>119,709</b> | <b>102,017</b> | <b>88,085</b>  | <b>190,102</b> | <b>..</b>         | <b>190,102</b> |
| <b>Madang—</b>            |               |               |                |                |               |                |                |                |                |                   |                |
| Madang .. ..              | 14,174        | 12,926        | 27,100         | 18,029         | 15,030        | 33,059         | 32,203         | 27,956         | 60,159         | 12,688            | 72,847         |
| Ramu .. ..                | 11,659        | 10,645        | 22,304         | 17,287         | 15,494        | 32,781         | 28,946         | 26,139         | 55,085         | 1,200             | 56,285         |
| Bogia .. ..               | 8,695         | 8,171         | 16,866         | 13,014         | 10,553        | 23,567         | 21,709         | 18,724         | 40,433         | ..                | 40,433         |
| Saidor .. ..              | 5,026         | 4,622         | 9,648          | 7,123          | 6,044         | 13,167         | 12,149         | 10,666         | 22,815         | ..                | 22,815         |
| <b>Total</b> .. ..        | <b>39,554</b> | <b>36,364</b> | <b>75,918</b>  | <b>55,453</b>  | <b>47,121</b> | <b>102,574</b> | <b>95,007</b>  | <b>83,485</b>  | <b>178,492</b> | <b>13,888</b>     | <b>192,380</b> |

APPENDIX I—continued

ENUMERATED INDIGENOUS POPULATION AT 30 JUNE 1972—continued

New Guinea—continued

| District and sub-district | Children |         |           | Adults  |         |           | Persons   |           |           | Estimated persons | Total     |
|---------------------------|----------|---------|-----------|---------|---------|-----------|-----------|-----------|-----------|-------------------|-----------|
|                           | Male     | Female  | Total     | Male    | Female  | Total     | Male      | Female    | Total     |                   |           |
| Morobe—                   |          |         |           |         |         |           |           |           |           |                   |           |
| Lae ..                    | 12,973   | 12,396  | 25,369    | 18,853  | 17,562  | 36,415    | 31,826    | 29,958    | 61,784    | ..                | 61,784    |
| Menyamya ..               | 9,087    | 8,065   | 17,152    | 10,083  | 9,624   | 19,707    | 19,170    | 17,689    | 36,859    | ..                | 36,859    |
| Finschhafen ..            | 11,134   | 10,564  | 21,698    | 16,826  | 14,951  | 31,777    | 27,960    | 25,515    | 53,475    | ..                | 53,475    |
| Kabwum ..                 | 6,561    | 6,200   | 12,761    | 10,428  | 10,265  | 20,693    | 16,989    | 16,465    | 33,454    | ..                | 33,454    |
| Wau ..                    | 2,340    | 2,122   | 4,462     | 3,163   | 2,590   | 5,753     | 5,503     | 4,712     | 10,215    | ..                | 10,215    |
| Mumeng ..                 | 3,854    | 3,528   | 7,382     | 5,981   | 5,351   | 11,332    | 9,835     | 8,879     | 18,714    | ..                | 18,714    |
| Kaiapit ..                | 6,641    | 6,129   | 12,770    | 5,837   | 5,255   | 11,092    | 12,478    | 11,384    | 23,862    | ..                | 23,862    |
| Total ..                  | 52,590   | 49,004  | 101,594   | 71,171  | 65,598  | 136,769   | 123,761   | 114,602   | 238,363   | ..                | 238,363   |
| West New Britain—         |          |         |           |         |         |           |           |           |           |                   |           |
| Talasea ..                | 6,610    | 6,064   | 12,674    | 6,568   | 5,747   | 12,315    | 13,178    | 11,811    | 24,989    | ..                | 24,989    |
| Hoskins ..                | 5,313    | 4,862   | 10,175    | 5,139   | 4,447   | 9,586     | 10,452    | 9,309     | 19,761    | ..                | 19,761    |
| Kandrian ..               | 4,014    | 3,796   | 7,810     | 5,342   | 4,113   | 9,455     | 9,356     | 7,909     | 17,265    | ..                | 17,265    |
| Total ..                  | 15,937   | 14,722  | 30,659    | 17,049  | 14,307  | 31,356    | 32,986    | 29,029    | 62,015    | ..                | 62,015    |
| East New Britain—         |          |         |           |         |         |           |           |           |           |                   |           |
| Rabaul ..                 | 16,337   | 15,302  | 31,639    | 15,631  | 12,951  | 28,582    | 31,968    | 28,253    | 60,221    | ..                | 60,221    |
| Kokopo ..                 | 4,856    | 4,405   | 9,261     | 4,790   | 4,056   | 8,846     | 9,646     | 8,461     | 18,107    | ..                | 18,107    |
| Pomio ..                  | 4,831    | 4,769   | 9,600     | 6,192   | 5,726   | 11,918    | 11,023    | 10,495    | 21,518    | ..                | 21,518    |
| Total ..                  | 26,024   | 24,476  | 50,500    | 26,613  | 22,733  | 49,346    | 52,637    | 47,209    | 99,846    | ..                | 99,846    |
| Bougainville—             |          |         |           |         |         |           |           |           |           |                   |           |
| Buka Passage ..           | 8,250    | 7,630   | 15,880    | 9,105   | 7,764   | 16,869    | 17,355    | 15,394    | 32,749    | ..                | 32,749    |
| Kieta ..                  | 5,082    | 4,889   | 9,971     | 5,589   | 5,097   | 10,686    | 10,671    | 9,986     | 20,657    | ..                | 20,657    |
| Buin ..                   | 6,320    | 5,757   | 12,077    | 6,734   | 5,849   | 12,583    | 13,054    | 11,606    | 24,660    | ..                | 24,660    |
| Total ..                  | 19,652   | 18,276  | 37,928    | 21,428  | 18,710  | 40,138    | 41,080    | 36,986    | 78,066    | ..                | 78,066    |
| New Ireland—              |          |         |           |         |         |           |           |           |           |                   |           |
| Kavieng ..                | 7,717    | 6,966   | 14,683    | 10,535  | 8,455   | 18,990    | 18,252    | 15,421    | 33,673    | ..                | 33,673    |
| Namatanai ..              | 4,373    | 4,281   | 8,654     | 6,157   | 4,983   | 11,140    | 10,530    | 9,264     | 19,794    | ..                | 19,794    |
| Total ..                  | 12,090   | 11,247  | 23,337    | 16,692  | 13,438  | 30,130    | 28,782    | 24,685    | 53,467    | ..                | 53,467    |
| Manus ..                  | 5,770    | 5,546   | 11,316    | 6,567   | 5,367   | 11,934    | 12,337    | 10,913    | 23,250    | ..                | 23,250    |
| Total ..                  | 5,770    | 5,546   | 11,316    | 6,567   | 5,367   | 11,934    | 12,337    | 10,913    | 23,250    | ..                | 23,250    |
| Total New Guinea ..       | 399,871  | 375,544 | 775,415   | 552,801 | 479,587 | 1,032,388 | 952,672   | 855,131   | 1,807,803 | 37,461            | 1,845,264 |
| Total Papua ..            | 144,687  | 132,985 | 277,672   | 190,702 | 165,451 | 356,153   | 335,389   | 298,436   | 633,825   | 52,793            | 686,618   |
| Grand Total               | 544,558  | 508,529 | 1,053,087 | 743,503 | 645,038 | 1,388,541 | 1,288,061 | 1,153,567 | 2,441,628 | 90,254            | 2,531,882 |

## 2. NON-INDIGENOUS POPULATION

*Papua.* At the June 1966 Census the non-indigenous population was 8,307 males and 6,070 females, a total of 14,377 persons.

*New Guinea.* At the June 1966 Census the non-indigenous population was 11,746 males and 8,546 females, a total of 20,292 persons.

The estimated non-indigenous population of Papua New Guinea at 30 June 1972 was 49,150 persons.

## 3. INDIGENOUS AND NON-INDIGENOUS POPULATION: OVERSEAS MIGRATION DURING YEAR ENDED 30 JUNE 1972

The information for this table is not yet available.

## 4. NON-INDIGENOUS POPULATION: REGISTRATION OF BIRTHS, DEATHS AND MARRIAGES DURING YEAR ENDED 30 JUNE 1972

*Papua*

| Sex            | Live births | Deaths |                  | Marriages |
|----------------|-------------|--------|------------------|-----------|
|                |             | Total  | Infant deaths(a) |           |
| Male .. .. .   | 297         | 6      | ..               | } 150     |
| Female .. .. . | 275         | 8      | 3                |           |
| Total .. .. .  | 572         | 14     | 3                |           |

(a) Deaths of children under one year of age.

*New Guinea*

| Sex            | Live births | Deaths |                  | Marriages |
|----------------|-------------|--------|------------------|-----------|
|                |             | Total  | Infant deaths(a) |           |
| Male .. .. .   | 495         | 37     | 1                | } 181     |
| Female .. .. . | 471         | 12     | 4                |           |
| Total .. .. .  | 966         | 49     | 5                |           |

(a) Deaths of children under one year of age.



## APPENDIX I—continued

## 5. POPULATION RESIDING IN MAJOR TOWNS AT CENSUS 30 JUNE 1971(a)

| Major towns        | Indigenous |         |         | Non-indigenous |         |         | Total persons |         |         |
|--------------------|------------|---------|---------|----------------|---------|---------|---------------|---------|---------|
|                    | Males      | Females | Persons | Males          | Females | Persons | Males         | Females | Persons |
| <i>Papua</i>       |            |         |         |                |         |         |               |         |         |
| Alotau .. ..       | 1,444      | 887     | 2,331   | 102            | 83      | 185     | 1,546         | 970     | 2,516   |
| Baimuru .. ..      | 314        | 306     | 620     | 8              | 3       | 11      | 322           | 309     | 631     |
| Balimo .. ..       | 368        | 304     | 672     | 5              | 5       | 10      | 373           | 309     | 682     |
| Bareina .. ..      | 342        | 254     | 596     | 18             | 12      | 30      | 360           | 266     | 626     |
| Daru .. ..         | 2,626      | 2,259   | 4,885   | 106            | 83      | 189     | 2,732         | 2,342   | 5,074   |
| Kerema .. ..       | 1,259      | 1,005   | 2,264   | 42             | 40      | 82      | 1,301         | 1,045   | 2,346   |
| Kikori .. ..       | 370        | 215     | 585     | 9              | 5       | 14      | 379           | 220     | 599     |
| Kiunga .. ..       | 621        | 321     | 942     | 47             | 11      | 58      | 668           | 332     | 1,000   |
| Kwikila .. ..      | 521        | 443     | 964     | 22             | 20      | 42      | 543           | 463     | 1,006   |
| Losuia .. ..       | 279        | 259     | 538     | 8              | 3       | 11      | 287           | 262     | 549     |
| Mendi .. ..        | 1,306      | 688     | 1,994   | 149            | 134     | 283     | 1,455         | 822     | 2,277   |
| Popondetta ..      | 2,585      | 1,711   | 4,296   | 152            | 143     | 295     | 2,737         | 1,854   | 4,591   |
| Port Moresby(g) .. | 31,436     | 19,552  | 50,988  | 8,162          | 7,094   | 15,256  | 39,598        | 26,646  | 66,244  |
| Samarai(g) .. ..   | 1,013      | 542     | 1,555   | 94             | 91      | 185     | 1,107         | 633     | 1,740   |
| Sogeri .. ..       | 647        | 138     | 785     | 50             | 39      | 89      | 697           | 177     | 874     |
| Tapini .. ..       | 311        | 241     | 552     | 18             | 18      | 36      | 329           | 259     | 588     |
| Tari .. ..         | 269        | 230     | 499     | 24             | 21      | 45      | 293           | 251     | 544     |
| <i>New Guinea</i>  |            |         |         |                |         |         |               |         |         |
| Aitape .. ..       | 530        | 351     | 881     | 28             | 15      | 43      | 558           | 366     | 924     |
| Ambunti .. ..      | 311        | 247     | 558     | 2              | 3       | 5       | 313           | 250     | 563     |
| Angoram .. ..      | 1,026      | 856     | 1,882   | 29             | 21      | 50      | 1,055         | 877     | 1,932   |
| Arawa(b) .. ..     | 2,722      | 404     | 3,126   | 1,528          | 388     | 1,916   | 4,250         | 792     | 5,042   |
| Banz .. ..         | 590        | 235     | 825     | 30             | 28      | 58      | 620           | 263     | 883     |
| Bogia .. ..        | 305        | 266     | 571     | 17             | 21      | 38      | 322           | 287     | 609     |
| Buin .. ..         | 392        | 171     | 563     | 30             | 20      | 50      | 422           | 191     | 613     |
| Bulolo .. ..       | 2,055      | 1,045   | 3,100   | 245            | 203     | 448     | 2,300         | 1,248   | 3,548   |
| Goroka .. ..       | 5,566      | 3,672   | 9,238   | 810            | 708     | 1,518   | 6,376         | 4,380   | 10,756  |
| Kagamuga .. ..     | 366        | 163     | 529     | 41             | 28      | 69      | 407           | 191     | 598     |
| Kainantu .. ..     | 658        | 411     | 1,069   | 97             | 79      | 176     | 755           | 490     | 1,245   |
| Kavieng .. ..      | 1,549      | 960     | 2,509   | 284            | 217     | 501     | 1,833         | 1,177   | 3,010   |
| Kerowagi .. ..     | 538        | 304     | 842     | 26             | 16      | 42      | 564           | 320     | 884     |
| Kieta .. ..        | 1,462      | 332     | 1,794   | 433            | 175     | 608     | 1,895         | 507     | 2,402   |
| Kimbe .. ..        | 691        | 214     | 905     | 102            | 65      | 167     | 793           | 279     | 1,072   |
| Kokopo(c) .. ..    | 717        | 825     | 1,542   | 126            | 164     | 290     | 843           | 989     | 1,832   |
| Kundiawa .. ..     | 984        | 827     | 1,811   | 134            | 111     | 245     | 1,118         | 938     | 2,056   |
| Lae(g) .. ..       | 18,156     | 10,338  | 28,494  | 3,385          | 2,820   | 6,205   | 21,541        | 13,158  | 34,699  |
| Laiagam .. ..      | 335        | 241     | 576     | 18             | 13      | 31      | 353           | 254     | 607     |
| Lorengau(d) .. ..  | 2,097      | 1,332   | 3,429   | 337            | 243     | 580     | 2,434         | 1,575   | 4,009   |
| Madang(g) .. ..    | 8,655      | 4,817   | 13,472  | 1,472          | 807     | 2,279   | 10,127        | 5,624   | 15,751  |
| Maprik .. ..       | 506        | 387     | 893     | 49             | 43      | 92      | 555           | 430     | 985     |
| Miak (Karkar) ..   | 322        | 161     | 483     | 16             | 8       | 24      | 338           | 619     | 507     |
| Minj .. ..         | 379        | 249     | 628     | 21             | 15      | 36      | 400           | 264     | 664     |
| Mount Hagen ..     | 4,891      | 3,507   | 8,398   | 658            | 553     | 1,211   | 5,549         | 4,060   | 9,609   |
| Panguna(e) .. ..   | 3,583      | 87      | 3,670   | 2,406          | 506     | 2,912   | 5,989         | 593     | 6,582   |
| Rabaul(f)(g) ..    | 12,100     | 8,600   | 20,700  | 2,193          | 1,885   | 4,078   | 14,293        | 10,485  | 24,778  |
| Sohano .. ..       | 1,044      | 671     | 1,715   | 62             | 55      | 117     | 1,106         | 726     | 1,832   |
| Vanimo .. ..       | 1,025      | 719     | 1,744   | 86             | 47      | 133     | 1,111         | 766     | 1,877   |
| Wabag .. ..        | 580        | 379     | 959     | 21             | 17      | 38      | 601           | 396     | 997     |
| Wau .. ..          | 897        | 564     | 1,461   | 116            | 117     | 233     | 1,013         | 681     | 1,694   |
| Wewak .. ..        | 6,470      | 4,913   | 11,383  | 439            | 332     | 771     | 6,909         | 5,245   | 12,154  |

- (a) Preliminary counts for urban areas are shown. In most cases the boundaries have been extended since the 1966 Census.  
 (b) Includes Loloho.  
 (c) Includes Vunapope.  
 (d) Includes Lombrum.  
 (e) Includes Wairowi.  
 (f) Because of difficulties in enumerating this area, particularly the urban villages, the totals for Rabaul are partly estimated.  
 (g) Includes overseas shipping in harbour.

## APPENDIX II

### ADMINISTRATIVE STRUCTURE OF GOVERNMENT

#### I. PUBLIC SERVICE: DEPARTMENTAL STAFF BY MANPOWER CLASS AT 30 JUNE 1972

| Department/Major Branch                         | Manpower Class 'A' |          | Manpower Class 'B' |          | Manpower Class 'C' |          | Manpower Class 'D' |          | Manpower Class 'E' |          | Manpower Class 'F' |          | Total Classes |          |
|---|--------------------|----------|--------------------|----------|--------------------|----------|--------------------|----------|--------------------|----------|--------------------|----------|---------------|----------|
|   | Local              | Overseas | Local              | Overseas | Local              | Overseas | Local              | Overseas | Local              | Overseas | Local              | Overseas | Local         | Overseas |
| Administrator .. .. .                           | ..                 | 29       | 3                  | 227      | 245                | 574      | 513                | 177      | 31                 | ..       | 135                | ..       | 927           | 1,007    |
| Office of Programming and Co-ordination .. .. . | ..                 | 8        | 1                  | 17       | 8                  | 30       | 3                  | 20       | 1                  | ..       | ..                 | ..       | 13            | 75       |
| House of Assembly .. .. .                       | ..                 | 6        | 1                  | 7        | 18                 | 9        | 15                 | 5        | 1                  | ..       | ..                 | ..       | 39            | 27       |
| Information and Extension Services .. .. .      | ..                 | 3        | 10                 | 12       | 208                | 51       | 85                 | 28       | 18                 | 1        | 14                 | ..       | 335           | 95       |
| Public Service Board .. .. .                    | ..                 | 24       | 1                  | 45       | 208                | 44       | 12                 | 23       | 7                  | ..       | ..                 | ..       | 228           | 136      |
| Administration College .. .. .                  | ..                 | 8        | 1                  | 35       | 7                  | 8        | 21                 | 13       | 11                 | ..       | ..                 | ..       | 40            | 64       |
| Treasury .. .. .                                | ..                 | 12       | 1                  | 36       | 100                | 126      | 70                 | 70       | 5                  | ..       | ..                 | ..       | 176           | 244      |
| Taxation .. .. .                                | ..                 | 4        | ..                 | 11       | 18                 | 44       | 31                 | 10       | ..                 | ..       | ..                 | ..       | 49            | 69       |
| Social Development and Home Affairs .. .. .     | 1                  | 7        | 1                  | 8        | 78                 | 70       | 123                | 25       | 98                 | 1        | 53                 | ..       | 354           | 111      |
| Stores .. .. .                                  | ..                 | 1        | ..                 | 4        | 21                 | 32       | 165                | 83       | 30                 | ..       | ..                 | ..       | 216           | 120      |
| Government Printer .. .. .                      | ..                 | 1        | ..                 | ..       | 42                 | 19       | 57                 | 3        | 2                  | ..       | ..                 | 1        | 101           | 24       |
| Public Health .. .. .                           | 63                 | 164      | 885                | 385      | 91                 | 98       | 2,708              | 201      | 143                | 1        | 924                | ..       | 4,814         | 849      |
| Agriculture Stock and Fisheries .. .. .         | 2                  | 147      | 58                 | 228      | 372                | 154      | 1,367              | 78       | 24                 | ..       | 237                | ..       | 2,060         | 607      |
| Education .. .. .                               | 3                  | 40       | 31                 | 96       | 99                 | 171      | 338                | 147      | 128                | ..       | 282                | ..       | 881           | 454      |
| Labour .. .. .                                  | ..                 | 5        | 1                  | 27       | 58                 | 44       | 61                 | 16       | 2                  | ..       | ..                 | ..       | 122           | 92       |
| Police Administration .. .. .                   | ..                 | 1        | ..                 | 12       | 6                  | 43       | 98                 | 92       | 9                  | 2        | ..                 | ..       | 113           | 150      |
| Law Headquarters .. .. .                        | 3                  | 46       | 42                 | 6        | 59                 | 43       | 56                 | 30       | 23                 | ..       | 51                 | ..       | 234           | 125      |
| Supreme Court .. .. .                           | ..                 | 1        | ..                 | ..       | 6                  | 2        | 3                  | 5        | ..                 | ..       | ..                 | ..       | 7             | 10       |
| Land Title Commission .. .. .                   | ..                 | ..       | ..                 | 1        | 5                  | 5        | 19                 | 4        | 3                  | ..       | ..                 | ..       | 27            | 10       |
| Liquor Commission .. .. .                       | ..                 | ..       | ..                 | ..       | 1                  | 2        | ..                 | 4        | 1                  | ..       | ..                 | ..       | 1             | 2        |
| Corrective Institutions .. .. .                 | ..                 | 1        | ..                 | ..       | 11                 | 29       | ..                 | 6        | ..                 | ..       | ..                 | ..       | 11            | 36       |
| Public Solicitor .. .. .                        | 1                  | 21       | ..                 | ..       | 1                  | ..       | 3                  | ..       | 2                  | ..       | ..                 | ..       | 7             | 27       |
| Lands, Surveys and Mines .. .. .                | 16                 | 63       | ..                 | 46       | 58                 | 96       | 166                | 38       | 70                 | 2        | 69                 | ..       | 379           | 245      |
| Forests .. .. .                                 | 1                  | 55       | 1                  | 24       | 48                 | 65       | 348                | 41       | 1                  | ..       | 48                 | ..       | 477           | 185      |
| Posts and Telegraphs .. .. .                    | ..                 | 28       | ..                 | 30       | 153                | 322      | 758                | 148      | 136                | 49       | 37                 | ..       | 1,084         | 577      |
| Trade and Industry .. .. .                      | ..                 | 4        | ..                 | 12       | 12                 | 9        | 5                  | 8        | 3                  | ..       | 1                  | ..       | 21            | 33       |
| Customs and Migration .. .. .                   | ..                 | 1        | ..                 | 6        | 5                  | 90       | 43                 | 30       | 9                  | ..       | 27                 | ..       | 84            | 127      |
| Public Works .. .. .                            | 1                  | 85       | ..                 | 54       | 655                | 456      | 1,535              | 77       | 26                 | 1        | 29                 | ..       | 2,246         | 673      |
| Transport Headquarters .. .. .                  | ..                 | 8        | ..                 | 8        | 6                  | 16       | 22                 | 6        | ..                 | ..       | ..                 | ..       | 28            | 38       |
| Transport Marine .. .. .                        | ..                 | 1        | ..                 | 10       | 70                 | 31       | 474                | 13       | 9                  | ..       | 6                  | ..       | 559           | 55       |
| Transport .. .. .                               | ..                 | ..       | ..                 | 3        | 85                 | 110      | 1,359              | 12       | 1                  | ..       | ..                 | ..       | 1,445         | 125      |
| Business Development .. .. .                    | 1                  | 3        | 10                 | 43       | 103                | 47       | 26                 | 9        | 2                  | ..       | 48                 | ..       | 190           | 102      |
| Totals .. .. .                                  | 92                 | 777      | 1,047              | 1,393    | 2,850              | 2,845    | 10,483             | 1,421    | 801                | 57       | 1,965              | 1        | 17,238        | 6,494    |

Note: The foregoing does not include staff employed by the Papua New Guinea Teaching Service.

#### Explanatory Notes

The Manpower classes shown in the tables above are defined as follows:

*Manpower Class 'A'*—Professional, managerial and related workers

Professional workers and top level managerial, administrative and executive workers whose level of responsibility is regarded as giving them professional status.

*Manpower Class 'B'*—Sub-professional, higher technical and related workers

Diplomas of post-secondary diploma course of at least two years duration, medium level managerial, administrative and executive workers.

*Manpower Class 'C'*—Skilled workers

Higher clerical and supervisory workers with higher secondary schooling (Form III and above), technicians, artisans and other workers having at least one year of formal training at Form III and above.

*Manpower Class 'D'*—Lower-skilled workers

Lower clerical workers, low-level technical workers with one year or less of formal training after secondary schooling (Form II or below).

*Manpower Class 'E'*—Unskilled workers

Workers in low-level positions requiring no formal training in exercise of particular skills such as labourers, messengers, cleaners, etc.

*Manpower Class 'F'*—Students, trainees and apprentices

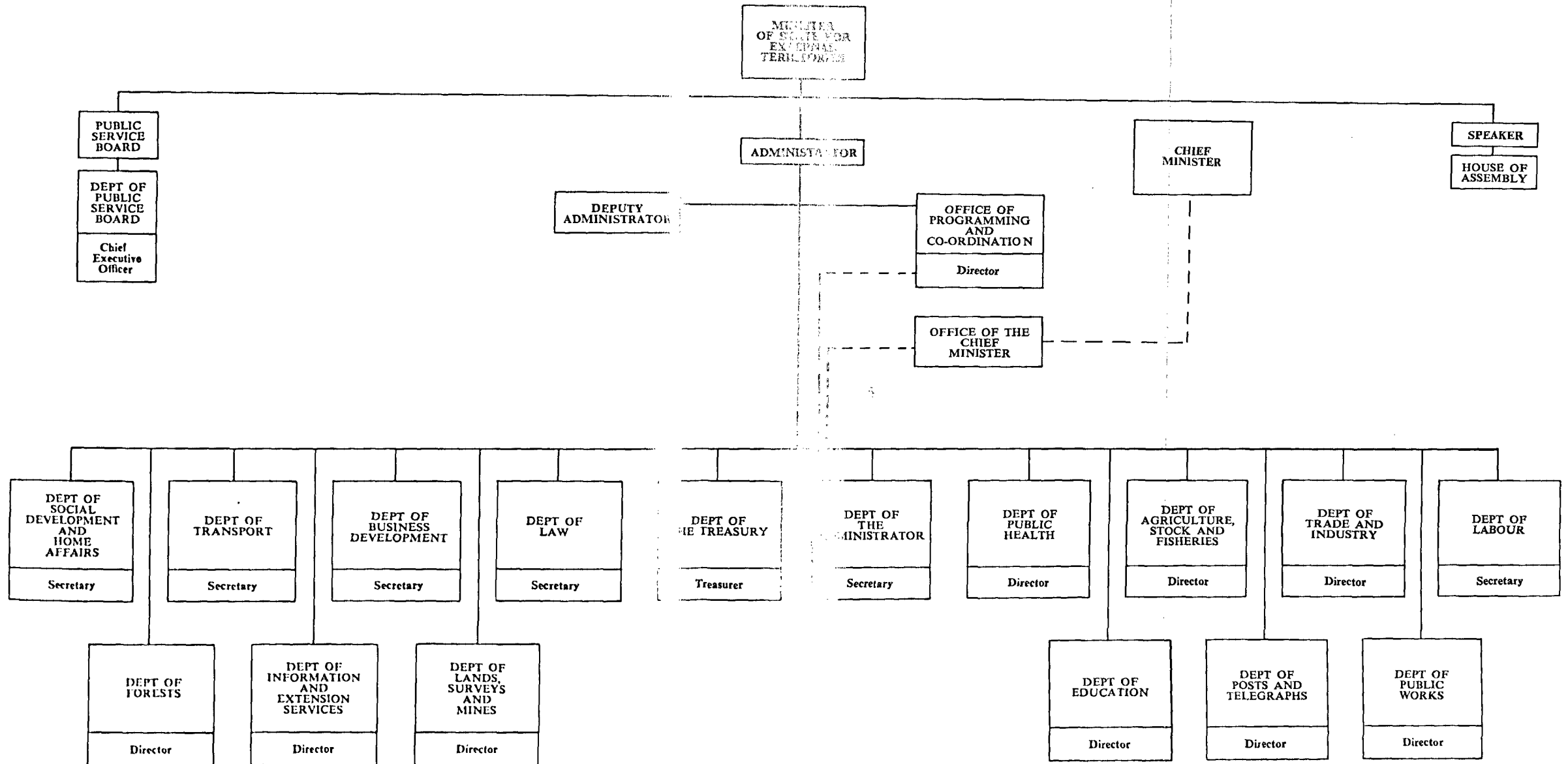
## 3. PUBLIC SERVICE: TOTAL STAFF BY DEPARTMENT OR MAJOR BRANCH AT 30 JUNE 1972

| Department or Major Branch                 | Local staff  |              |              |              |                     |           | Overseas staff |              |              |              |                   |              |              |              |           | Other staff | Total  |
|--|--------------|--------------|--------------|--------------|---------------------|-----------|----------------|--------------|--------------|--------------|-------------------|--------------|--------------|--------------|-----------|-------------|--------|
|  | Permanent    |              | Temporary    |              | Cadets and trainees | Sub-total | Permanent      |              | Contract     |              | Seconded contract |              | Temporary    |              | Sub-total |             |        |
|  | 2nd Division | 3rd Division | 2nd Division | 3rd Division |                     |           | 2nd Division   | 3rd Division | 2nd Division | 3rd Division | 2nd Division      | 3rd Division | 2nd Division | 3rd Division |           |             |        |
| Administrator .. ..                        | 235          | 421          | 23           | 113          | 135                 | 927       | 281            | 2            | 455          | 6            | 40                | 1            | 51           | 171          | 1,007     | 1,199       | 3,133  |
| Office of Programming and Co-ordination .. | 8            | 2            | 1            | 2            | ..                  | 13        | 6              | ..           | 13           | 7            | 11                | 3            | 21           | 14           | 75        | 3           | 91     |
| House of Assembly ..                       | 14           | 10           | 3            | 8            | ..                  | 39        | 7              | ..           | 7            | 1            | 2                 | 1            | 3            | 6            | 27        | 5           | 71     |
| Information and Extension Services .. ..   | 129          | 99           | 53           | 40           | 14                  | 335       | 5              | 1            | 31           | 6            | 5                 | ..           | 11           | 36           | 95        | 38          | 468    |
| Public Service Board ..                    | 39           | 10           | 20           | 9            | 150                 | 228       | 16             | ..           | 33           | 8            | 24                | 1            | 37           | 17           | 136       | 17          | 381    |
| Administration College ..                  | 4            | 13           | 3            | 20           | ..                  | 40        | 10             | ..           | 19           | 1            | 6                 | ..           | 15           | 13           | 64        | 44          | 148    |
| Treasury .. ..                             | 74           | 59           | 27           | 16           | ..                  | 176       | 34             | 2            | 57           | 24           | 29                | 3            | 55           | 40           | 244       | 14          | 434    |
| Taxation .. ..                             | 7            | 23           | 11           | 8            | ..                  | 49        | 7              | ..           | 9            | 1            | 32                | ..           | 10           | 10           | 69        | 4           | 122    |
| Social Development and Home Affairs ..     | 38           | 66           | 42           | 155          | 53                  | 354       | 23             | 8            | 15           | 5            | 2                 | ..           | 35           | 23           | 111       | 436         | 901    |
| Stores .. ..                               | 14           | 110          | 7            | 85           | ..                  | 216       | 9              | 6            | 7            | 31           | 2                 | ..           | 17           | 48           | 120       | 183         | 519    |
| Government Printer ..                      | 3            | 37           | ..           | 61           | ..                  | 101       | 1              | 1            | 2            | 11           | ..                | ..           | 1            | 8            | 24        | 38          | 163    |
| Public Health .. ..                        | 58           | 2,044        | 85           | 1,703        | 924                 | 4,814     | 68             | 68           | 133          | 129          | 4                 | 2            | 72           | 373          | 849       | 2,086       | 7,749  |
| Agriculture Stock and Fisheries .. ..      | 69           | 831          | 61           | 862          | 237                 | 2,060     | 100            | 13           | 274          | 62           | 15                | 2            | 54           | 87           | 607       | 2,617       | 5,284  |
| Education .. ..                            | 63           | 119          | 42           | 375          | 282                 | 881       | 72             | 3            | 118          | 8            | 11                | ..           | 94           | 148          | 454       | 39          | 1,374  |
| Labour .. ..                               | 55           | 51           | 3            | 13           | ..                  | 122       | 28             | 3            | 15           | 8            | 8                 | 1            | 13           | 16           | 92        | 7           | 221    |
| Police Administration ..                   | 4            | 33           | 2            | 74           | ..                  | 133       | 6              | ..           | 14           | 2            | 4                 | ..           | 31           | 93           | 150       | 3,914       | 4,177  |
| Law Headquarters .. ..                     | 83           | 43           | 18           | 39           | 51                  | 234       | 15             | ..           | 52           | 7            | 5                 | ..           | 18           | 28           | 125       | 18          | 377    |
| Supreme Court .. ..                        | ..           | 3            | ..           | 4            | ..                  | 7         | ..             | ..           | 2            | 4            | ..                | ..           | 2            | 2            | 10        | 17          | 34     |
| Land Titles Commission ..                  | ..           | 22           | ..           | 5            | ..                  | 27        | 2              | ..           | 2            | ..           | ..                | ..           | 1            | 5            | 10        | 11          | 48     |
| Liquor Commission .. ..                    | ..           | 1            | ..           | ..           | ..                  | 1         | ..             | ..           | 1            | ..           | ..                | ..           | ..           | ..           | 1         | 2           | 4      |
| Corrective Institutions ..                 | 11           | ..           | ..           | ..           | ..                  | 11        | 8              | ..           | ..           | 5            | 5                 | ..           | 6            | 5            | 36        | 1,065       | 1,112  |
| Public Solicitor .. ..                     | 1            | ..           | 1            | 4            | ..                  | 7         | ..             | ..           | 15           | ..           | 4                 | ..           | 2            | 4            | 27        | 3           | 37     |
| Lands, Surveys and Mines ..                | 31           | 156          | 16           | 107          | 69                  | 379       | 47             | 12           | 71           | 14           | 15                | 5            | 36           | 45           | 245       | 222         | 846    |
| Forests .. ..                              | 11           | 252          | 12           | 124          | 48                  | 447       | 24             | 12           | 53           | 21           | 8                 | ..           | 19           | 48           | 185       | 1,560       | 2,192  |
| Posts and Telegraphs .. ..                 | 32           | 528          | 7            | 480          | 37                  | 1,084     | 37             | 33           | 46           | 101          | 33                | 94           | 53           | 180          | 597       | 124         | 1,785  |
| Trade and Industry .. ..                   | 7            | 4            | 4            | 5            | 1                   | 21        | 10             | ..           | 10           | ..           | 2                 | ..           | 9            | 9            | 33        | ..          | 54     |
| Customs and Migration ..                   | 5            | 34           | ..           | 18           | 27                  | 84        | 12             | ..           | 20           | 3            | 5                 | 1            | 60           | 26           | 127       | 1           | 212    |
| Public Works .. ..                         | 67           | 1,041        | 52           | 1,057        | 29                  | 2,246     | 29             | 31           | 97           | 219          | 26                | 6            | 38           | 227          | 673       | 6,658       | 9,577  |
| Transport Headquarters ..                  | 3            | 7            | 3            | 15           | ..                  | 28        | 5              | ..           | 9            | 2            | 9                 | ..           | 9            | 4            | 38        | 5           | 71     |
| Transport Marine .. ..                     | 1            | 283          | ..           | 269          | 6                   | 559       | 2              | 8            | 10           | 9            | 3                 | ..           | 2            | 21           | 55        | 17          | 631    |
| Transport R.O.D.(a) .. ..                  | 6            | 453          | 4            | 982          | ..                  | 1,445     | 1              | 20           | 3            | 63           | ..                | ..           | 10           | 28           | 125       | 97          | 1,667  |
| Business Development ..                    | 106          | 19           | 8            | 9            | 48                  | 190       | 28             | 1            | 53           | 4            | 3                 | ..           | 4            | 9            | 102       | 8           | 300    |
| Total .. ..                                | 1,178        | 6,775        | 508          | 6,662        | 2,115               | 17,238    | 895            | 224          | 1,653        | 762          | 313               | 120          | 782          | 1,745        | 6,494     | 20,451      | 44,183 |
| PNG Teaching Service ..                    | 451          | 1,387        | 179          | 453          | ..                  | 2,470     | 161            | 37           | 509          | 103          | 105               | 10           | 441          | 49           | 1,415     | 66          | 3,951  |

(a) Road Operations]Division.

APPENDIX II—continued

2. ADMINISTRATIVE ORGANISATION CHART AT 30 JUNE 1972



## 4. PATROLS AND INSPECTION VISITS BY DISTRICT ADMINISTRATION OFFICERS DURING YEAR ENDED 30 JUNE 1972

| District                               | Headquarters       | Number of sub-districts | Number of patrols | Number of days on patrol | Number of field days | Inspections by District Commissioners and Deputy Commissioners | Inspections by Assistant District Commissioners |
|--|--------------------|-------------------------|-------------------|--------------------------|----------------------|--|---|
| <b>Papua—</b>                          |                    |                         |                   |                          |                      |  |   |
| Western .. ..                          | Daru .. ..         | 5                       | 144               | 2,361                    | 2,375                | 91   | 36  |
| Gulf .. ..                             | Kerema .. ..       | 3                       | 121               | 2,005                    | 1,844                | 104  | 20  |
| Central .. ..                          | Port Moresby .. .. | 5                       | 116               | 1,744                    | 3,086                | 31   | 21  |
| Southern Highlands .. ..               | Mendi .. ..        | 7                       | 132               | 3,377                    | 2,934                | 77   | 16  |
| Milne Bay .. ..                        | Alotau .. ..       | 6                       | 50                | 1,322                    | 2,114                | 27   | 14  |
| Northern .. ..                         | Popondetta .. ..   | 3                       | 63                | 938                      | 2,047                | 16   | 5   |
| Total for Papua .. ..                  | .. ..              | 29                      | 626               | 11,747                   | 14,400               | 346  | 112   |
| <b>New Guinea—</b>                     |                    |                         |                   |                          |                      |  |   |
| East Sepik .. ..                       | Wewak .. ..        | 4                       | 82                | 1,305                    | 4,256                | 68   | 15  |
| West Sepik .. ..                       | Vanimo .. ..       | 5                       | 76                | 1,246                    | 1,586                | 22   | 23  |
| Western Highlands .. ..                | Mount Hagen .. ..  | 7                       | 93                | 2,808                    | 4,694                | 125  | 33  |
| Eastern Highlands .. ..                | Goroko .. ..       | 6                       | 155               | 2,577                    | 6,624                | 44   | 2   |
| Chimbu .. ..                           | Kundiawa .. ..     | 5                       | 45                | 1,130                    | 3,752                | 20   | 4   |
| Madang .. ..                           | Madang .. ..       | 4                       | 83                | 1,303                    | 2,595                | 30   | 40  |
| Morobe .. ..                           | Lae .. ..          | 7                       | 156               | 2,083                    | 4,535                | 40   | 38  |
| West New Britain .. ..                 | Kimbe .. ..        | 3                       | 45                | 871                      | 978                  | 19   | 9   |
| East New Britain .. ..                 | Rabaul .. ..       | 3                       | 20                | 449                      | 3,972                | 75   | 36  |
| Bougainville .. ..                     | Arawa .. ..        | 3                       | 33                | 535                      | 2,491                | 32   | 17  |
| New Ireland .. ..                      | Kavieng .. ..      | 2                       | 69                | 943                      | 1,334                | 14   | 13  |
| Manus .. ..                            | Lorengau .. ..     | 1                       | 39                | 474                      | 1,126                | ..   | ..  |
| Total for New Guinea .. ..             | .. ..              | 50                      | 896               | 15,724                   | 37,943               | 489  | 230   |
| Grand Total for Papua New Guinea .. .. | .. ..              | 79                      | 1,522             | 27,471                   | 52,343               | 835  | 342   |

## 5. UNRESTRICTED AND RESTRICTED AREAS

There are no areas of Papua New Guinea classified as restricted.

## 6. NATIVE WAR DAMAGE COMPENSATION

No claims were made during the year ended 30 June 1972.

APPENDIX II—*continued*

7. NUMBER OF VILLAGE OFFICIALS AND COUNCILLORS BY DISTRICT AT 30 JUNE 1971 AND 1972

| District                                | 30 June 1971       |                              |               | 30 June 1972       |                              |               |
|---|--------------------|------------------------------|---------------|--------------------|------------------------------|---------------|
|   | Village officials* | Local government councillors | Total Persons | Village officials* | Local government councillors | Total persons |
| Papua—                                  |                    |                              |               |                    |                              |               |
| Western .. .. .                         | 315                | 113                          | 428           | 105                | 153                          | 258           |
| Gulf .. .. .                            | 211                | 149                          | 360           | 205                | 161                          | 366           |
| Central .. .. .                         | 454                | 269                          | 723           | 420                | 301                          | 721           |
| Southern Highlands ..                   | 4                  | 374                          | 378           | 38                 | 299                          | 337           |
| Milne Bay .. .. .                       | 149                | 343                          | 492           | 144                | 343                          | 487           |
| Northern .. .. .                        | ..                 | 128                          | 128           | ..                 | 128                          | 128           |
| Total for Papua ..                      | 1,133              | 1,376                        | 2,509         | 912                | 1,385                        | 2,297         |
| New Guinea—                             |                    |                              |               |                    |                              |               |
| East Sepik .. .. .                      | 140                | 429                          | 569           | 140                | 420                          | 560           |
| West Sepik .. .. .                      | 195                | 224                          | 419           | 194                | 226                          | 420           |
| Western Highlands ..                    | 215                | 435                          | 650           | 103                | 461                          | 564           |
| Eastern Highlands ..                    | 65                 | 309                          | 374           | 80                 | 311                          | 391           |
| Chimbu .. .. .                          | 61                 | 253                          | 314           | 36                 | 253                          | 289           |
| Madang .. .. .                          | 569                | 381                          | 950           | 279                | 381                          | 660           |
| Morobe .. .. .                          | 388                | 303                          | 691           | 388                | 284                          | 672           |
| West New Britain ..                     | 134                | 126                          | 260           | 165                | 129                          | 294           |
| East New Britain ..                     | 240                | 102                          | 342           | 239                | 46                           | 285           |
| Bougainville .. .. .                    | 167                | 199                          | 366           | 163                | 202                          | 365           |
| New Ireland .. .. .                     | ..                 | 121                          | 121           | ..                 | 112                          | 112           |
| Manus .. .. .                           | 12                 | 33                           | 45            | 12                 | 33                           | 45            |
| Total for New Guinea ..                 | 2,186              | 2,915                        | 5,101         | 1,799              | 2,858                        | 4,657         |
| Grand Total for Papua and New Guinea .. | 3,319              | 4,291                        | 7,610         | 2,711              | 4,243                        | 6,954         |

\* The term 'Village Official' refers to village constables in Papua and Luluais and Tultuls in New Guinea.

APPENDIX II—continued

8. LOCAL GOVERNMENT COUNCILS: PROCLAMATION DATE, NUMBER OF VILLAGE GROUPS COVERED, POPULATION, NUMBER OF COUNCILLORS AND TAX RATES BY COUNCIL AND DISTRICT AT 30 JUNE 1972

| Council and district    | Date first proclaimed | Number of village groups in council area | Approximate population covered | Number of councillors | Tax rates for year ending 30 June 1972 |         |
|-------------------------|-----------------------|--|--------------------------------|-----------------------|--|---------|
|                         |                       |  |                                |                       | Males                                  | Females |
|                         |                       |  |                                |                       | \$                                     | \$      |
| <i>Papua</i>            |                       |  |                                |                       |  |         |
| <i>Central—</i>         |                       |  |                                |                       |  |         |
| Amazon Bay .. ..        | 30.3.60               | 43                                       | 5,933                          | 18                    | { 12.00                                | ..      |
|                         |                       |  |                                |                       | { 10.00                                | ..      |
| Guari .. ..             | 17.4.72               | 46                                       | 5,305                          | 23                    | ..                                     | ..      |
| Hiri .. ..              | 8.3.66                | 63                                       | 14,395                         | 22                    | 12.00                                  | ..      |
| Kairuku .. ..           | 1.5.62                | 31                                       | 12,273                         | 35                    | 8.00                                   | ..      |
| Kuni .. ..              | 9.7.71                | 23                                       | 2,584                          | 9                     | 2.50                                   | 0.50    |
| Marshall Lagoon .. ..   | 25.10.57              | 43                                       | 16,527                         | 32                    | 8.00                                   | 1.00    |
| Mekeo .. ..             | 29.8.61               | 22                                       | 7,218                          | 30                    | { 10.00                                | ..      |
|                         |                       |  |                                |                       | { 9.00                                 | ..      |
| Port Moresby City .. .. | 21.1.71               | ..                                       | 60,500                         | 21                    | 12.00                                  | 12.00   |
| Rigo .. ..              | 4.8.59                | 89                                       | 16,256                         | 50                    | 10.00                                  | ..      |
| Tapini .. ..            | 13.9.63               | 75                                       | 9,158                          | 35                    | 6.00                                   | 1.00    |
| Woitape .. ..           | 28.10.65              | 55                                       | 10,616                         | 26                    | 6.00                                   | 1.00    |
| <i>Gulf—</i>            |                       |  |                                |                       |  |         |
| Baimuru .. ..           | 3.3.66                | 43                                       | 6,717                          | 23                    | 6.00                                   | 2.00    |
| East Kerema .. ..       | 21.12.60              | 34                                       | 16,112                         | 23                    | 14.00                                  | 3.00    |
| Kaipi .. ..             | 22.1.62               | 23                                       | 4,425                          | 14                    | 10.00                                  | 2.00    |
| Kerema Bay .. ..        | 8.4.60                | 20                                       | 5,371                          | 16                    | { 10.00                                | 3.00    |
|                         |                       |  |                                |                       | { 6.00                                 | 2.00    |
| Kikori .. ..            | 14.4.66               | 99                                       | 9,329                          | 36                    | 8.00                                   | 2.00    |
| Korimimi .. ..          | 3.12.64               | 26                                       | 4,844                          | 18                    | 9.00                                   | 1.00    |
| Orokolo .. ..           | 9.5.60                | 25                                       | 5,878                          | 19                    | 8.00                                   | 1.00    |
| <i>Milne Bay—</i>       |                       |  |                                |                       |  |         |
| Bwana Bwana .. ..       | 3.3.66                | 22                                       | 7,317                          | 21                    | 8.00                                   | 2.00    |
| Daga .. ..              | 23.9.65               | 15                                       | 4,023                          | 13                    | 6.00                                   | 1.00    |
| Dobu .. ..              | 17.4.61               | 53                                       | 10,056                         | 26                    | { 6.00                                 | 0.50    |
|                         |                       |  |                                |                       | { 4.00                                 | 0.50    |
|                         |                       |  |                                |                       | { 1.00                                 | ..      |
|                         |                       |  |                                |                       | { 7.00                                 | ..      |
| Duau .. ..              | 21.12.62              | 27                                       | 8,134                          | 28                    | { 5.00                                 | ..      |
|                         |                       |  |                                |                       | { 4.00                                 | ..      |
|                         |                       |  |                                |                       | { 6.00                                 | 0.20    |
| Goodenough Island .. .. | 6.2.64                | 24                                       | 10,817                         | 25                    | { 4.00                                 | 0.20    |
|                         |                       |  |                                |                       | { 2.00                                 | 0.20    |
| Kiriwina .. ..          | 19.1.66               | 88                                       | 12,621                         | 31                    | 4.00                                   | 0.50    |
| Louisiade .. ..         | 20.5.58               | 58                                       | 12,666                         | 28                    | { 9.00                                 | 1.00    |
|                         |                       |  |                                |                       | { 8.00                                 | 1.00    |
|                         |                       |  |                                |                       | { 6.00                                 | 1.00    |
| Makamaka .. ..          | 13.12.62              | 26                                       | 5,390                          | 26                    | { 4.00                                 | 1.00    |
| Maramatana .. ..        | 7.12.62               | 20                                       | 4,457                          | 18                    | 8.00                                   | 1.00    |
| Milne Bay .. ..         | 2.12.57               | 32                                       | 8,370                          | 34                    | { 10.00                                | 2.00    |
|                         |                       |  |                                |                       | { 7.00                                 | ..      |
|                         |                       |  |                                |                       | { 2.00                                 | ..      |
|                         |                       |  |                                |                       | { 10.00                                | 1.00    |
| Murua .. ..             | 4.2.67                | 23                                       | 2,506                          | 12                    | { 5.00                                 | ..      |
|                         |                       |  |                                |                       | { 4.00                                 | ..      |
|                         |                       |  |                                |                       | { 8.00                                 | 1.00    |
| Suau .. ..              | 6.12.61               | 28                                       | 5,048                          | 26                    | { 4.00                                 | 1.00    |
|                         |                       |  |                                |                       | { 1.00                                 | 0.50    |
| Weraura .. ..           | 27.8.63               | 39                                       | 9,538                          | 32                    | 5.00                                   | 1.00    |
|                         |                       |  |                                |                       | { 6.00                                 | 0.50    |
|                         |                       |  |                                |                       | { 5.00                                 | 0.20    |
| West Fergusson .. ..    | 19.1.66               | 23                                       | 6,793                          | 23                    | { 4.00                                 | 0.10    |
|                         |                       |  |                                |                       | { 3.00                                 | ..      |
|                         |                       |  |                                |                       | { 2.00                                 | ..      |
| <i>Northern—</i>        |                       |  |                                |                       |  |         |
| Afore .. ..             | 13.3.67               | 83                                       | 8,135                          | 23                    | { 6.00                                 | ..      |
|                         |                       |  |                                |                       | { 4.00                                 | ..      |
| Cape Nelson .. ..       | 6.12.61               | 100                                      | 9,075                          | 20                    | 7.00                                   | ..      |
| Higaturu .. ..          | 30.4.56               | 80                                       | 19,182                         | 31                    | 10.00                                  | ..      |
| Ilimo .. ..             | 10.7.58               | 55                                       | 8,039                          | 19                    | 10.00                                  | ..      |
| Oro Bay .. ..           | 1.4.63                | 73                                       | 10,332                         | 22                    | 8.00                                   | 0.50    |
| Tamata .. ..            | 23.9.65               | 45                                       | 5,201                          | 17                    | 6.00                                   | ..      |

APPENDIX II—continued

8. LOCAL GOVERNMENT COUNCILS: PROCLAMATION DATE, NUMBER OF VILLAGE GROUPS COVERED, POPULATION, NUMBER OF COUNCILLORS AND TAX RATES BY COUNCIL AND DISTRICT AT 30 JUNE 1972—continued

| Council and district       | Date first proclaimed | Number of village groups in council area | Approximate population covered | Number of councillors | Tax rates for year ending 30 June 1972 |         |      |
|----------------------------|-----------------------|--|--------------------------------|-----------------------|--|---------|------|
|                            |                       |  |                                |                       | Males                                  | Females |      |
|                            |                       |  |                                |                       | \$                                     | \$      |      |
| <i>Papua—continued</i>     |                       |  |                                |                       |  |         |      |
| <i>Southern Highlands—</i> |                       |  |                                |                       |  |         |      |
| Erave .. .. .              | 14.4.66               | 32                                       | 6,089                          | 25                    | }                                      | 5.00    | 1.00 |
|                            |                       |  |                                |                       |  | 2.50    | 0.50 |
| Ialibu .. .. .             | 30.12.63              | 54                                       | 19,524                         | 32                    | }                                      | 5.00    | 0.30 |
|                            |                       |  |                                |                       |  | 2.50    | 0.30 |
| Kagua .. .. .              | 16.1.64               | 86                                       | 21,528                         | 34                    | }                                      | 3.00    | 0.50 |
|                            |                       |  |                                |                       |  | 2.50    | 0.50 |
| Komo .. .. .               | 1.6.67                | 28                                       | 4,610                          | 12                    | }                                      | 3.00    | 0.30 |
|                            |                       |  |                                |                       |  | 4.00    | 2.00 |
| Koroba .. .. .             | 23.7.64               | 49                                       | 20,838                         | 38                    | }                                      | 3.00    | 0.50 |
|                            |                       |  |                                |                       |  | 3.00    | 0.30 |
| Lai Valley .. .. .         | 2.7.70                | 18                                       | 7,307                          | 17                    | }                                      | 3.00    | 0.30 |
|                            |                       |  |                                |                       |  | 2.00    | 0.50 |
| Lake Kutubu .. .. .        | 9.6.66                | 27                                       | 3,780                          | 12                    | }                                      | 2.00    | 0.50 |
|                            |                       |  |                                |                       |  | 3.00    | 0.20 |
| Margarima .. .. .          | 9.6.66                | 32                                       | 10,994                         | 30                    | }                                      | 5.00    | 1.00 |
|                            |                       |  |                                |                       |  | 4.00    | 0.30 |
| Mendi .. .. .              | 25.7.62               | 72                                       | 26,773                         | 39                    | }                                      | 2.00    | 0.30 |
|                            |                       |  |                                |                       |  | 4.00    | 1.00 |
| Nipa .. .. .               | 12.7.66               | 39                                       | 16,342                         | 31                    | }                                      | 2.00    | 0.30 |
|                            |                       |  |                                |                       |  | 4.00    | 1.00 |
| Pangia .. .. .             | 17.6.65               | 37                                       | 17,986                         | 41                    | }                                      | 2.00    | 0.50 |
|                            |                       |  |                                |                       |  | 2.00    | 0.40 |
| Poroma .. .. .             | 28.10.70              | 20                                       | 7,509                          | 15                    | }                                      | 2.00    | 0.40 |
|                            |                       |  |                                |                       |  | 6.00    | ..   |
| Tari .. .. .               | 25.5.64               | 92                                       | 27,793                         | 48                    |  |         |      |
| <i>Western—</i>            |                       |  |                                |                       |  |         |      |
| Bamu .. .. .               | 9.7.71                | 47                                       | 5,129                          | 12                    |  | 0.50    | ..   |
| Gogodala .. .. .           | 26.3.59               | 43                                       | 12,179                         | 27                    |  | 5.50    | ..   |
| Kiunga .. .. .             | 23.9.65               | 65                                       | 5,589                          | 23                    |  | 3.00    | ..   |
| Kiwai .. .. .              | 9.10.58               | 40                                       | 12,589                         | 16                    | }                                      | 11.00   | ..   |
|                            |                       |  |                                |                       |  | 8.00    | ..   |
| Lake Murray .. .. .        | 7.9.67                | 21                                       | 3,720                          | 12                    | }                                      | 5.00    | ..   |
|                            |                       |  |                                |                       |  | 3.00    | ..   |
| Morhead .. .. .            | 9.10.69               | 49                                       | 4,696                          | 16                    | }                                      | 1.00    | ..   |
|                            |                       |  |                                |                       |  | 1.00    | ..   |
| Ningerum .. .. .           | 5.8.71                | 92                                       | 4,717                          | 28                    | }                                      | 8.00    | ..   |
|                            |                       |  |                                |                       |  | 8.00    | ..   |
| Oriomo Bituri .. .. .      | 29.5.63               | 31                                       | 4,844                          | 19                    |  |         |      |
| Total .. .. .              |                       | 2,648                                    | 625,677                        | 1,452                 |  |         |      |

*New Guinea*

|                        |          |     |        |    |   |      |      |
|------------------------|----------|-----|--------|----|---|------|------|
| <i>East Sepik</i>      |          |     |        |    |   |      |      |
| Ambunti .. .. .        | 25.10.67 | 39  | 7,976  | 27 | } | 2.00 | ..   |
|                        |          |     |        |    |   | 5.00 | ..   |
| Angoram .. .. .        | 9.5.68   | 118 | 21,325 | 62 | } | 4.00 | ..   |
|                        |          |     |        |    |   | 2.00 | ..   |
| Dreikikir .. .. .      | 28.10.65 | 103 | 18,469 | 49 | } | 4.00 | 1.00 |
|                        |          |     |        |    |   | 7.00 | ..   |
| Gaui .. .. .           | 10.6.64  | 58  | 14,022 | 40 | } | 4.50 | ..   |
|                        |          |     |        |    |   | 3.50 | ..   |
| Greater Maprik .. .. . | 23.9.65  | 133 | 33,252 | 49 | } | 5.00 | ..   |
|                        |          |     |        |    |   | 9.00 | 2.50 |
| Keram .. .. .          | 3.3.66   | 50  | 9,128  | 31 | } | 1.00 | ..   |
|                        |          |     |        |    |   | 1.00 | ..   |
| Saussia .. .. .        | 18.10.62 | 66  | 12,949 | 35 | } | 5.00 | ..   |
|                        |          |     |        |    |   | 9.00 | 2.50 |
| Wewak-But .. .. .      | 4.2.64   | 136 | 30,980 | 50 | } | 1.00 | ..   |
|                        |          |     |        |    |   | 5.00 | ..   |
| Wosera .. .. .         | 5.11.62  | 68  | 19,379 | 41 | } | 5.00 | ..   |
|                        |          |     |        |    |   | 5.00 | ..   |
| Yangoru .. .. .        | 6.12.61  | 75  | 19,052 | 45 |   |      |      |



APPENDIX II—continued

8. LOCAL GOVERNMENT COUNCILS: PROCLAMATION DATE, NUMBER OF VILLAGE GROUPS COVERED, POPULATION, NUMBER OF COUNCILLORS AND TAX RATES BY COUNCIL AND DISTRICT AT 30 JUNE 1972—continued

| Council and district        | Date first proclaimed | Number of village groups in council area | Approximate population covered | Number of councillors | Tax rates for year ending 30 June 1972 |         |
|-----------------------------|-----------------------|--|--------------------------------|-----------------------|--|---------|
|                             |                       |  |                                |                       | Males                                  | Females |
|                             |                       |  |                                |                       | \$                                     | \$      |
| <i>New Guinea—continued</i> |                       |  |                                |                       |  |         |
| <i>West Sepik—</i>          |                       |  |                                |                       |  |         |
| Amanab .. .. .              | 20.5.65               | 63                                       | 5,394                          | 25                    | 1.50                                   | ..      |
| Green River .. .. .         | 30.12.64              | 36                                       | 4,092                          | 23                    | 4.50                                   | ..      |
| Nuku .. .. .                | 25.10.67              | 89                                       | 18,121                         | 38                    | 2.50                                   | ..      |
| Pagei .. .. .               | 17.2.64               | 29                                       | 2,948                          | 18                    | 3.00                                   | ..      |
| Siau .. .. .                | 10.5.61               | 75                                       | 16,673                         | 30                    | 5.00                                   | 0.50    |
| Telefomin .. .. .           | 25.10.67              | 54                                       | 5,125                          | 17                    | 7.00                                   | 0.20    |
| Vanimo .. .. .              | 30.8.62               | 18                                       | 3,636                          | 13                    | 5.00                                   | ..      |
| Walsa .. .. .               | 17.11.64              | 22                                       | 2,937                          | 17                    | 4.00                                   | 0.50    |
| Wapei .. .. .               | 23.12.63              | 135                                      | 22,704                         | 43                    | 6.50                                   | 0.80    |
| <i>Western Highlands—</i>   |                       |  |                                |                       |  |         |
| Baiyer-Lumusa .. .. .       | 7.9.67                | 85                                       | 15,563                         | 29                    | 2.00                                   | ..      |
| Dei .. .. .                 | 15.2.63               | 75                                       | 18,086                         | 46                    | 4.00                                   | ..      |
| Jimi .. .. .                | 3.3.66                | 127                                      | 20,881                         | 40                    | 2.00                                   | ..      |
| Kandep .. .. .              | 7.4.67                | 52                                       | 21,086                         | 26                    | 4.00                                   | ..      |
| Kompiani .. .. .            | 3.3.66                | 72                                       | 10,920                         | 26                    | 4.00                                   | ..      |
| Lagaip .. .. .              | 3.12.64               | 167                                      | 29,400                         | 33                    | 6.00                                   | 0.20    |
| Lake Kopiago .. .. .        | 28.3.72               | 37                                       | 7,783                          | 18                    | ..                                     | ..      |
| Mount Giluwe .. .. .        | 9.10.69               | 52                                       | 18,687                         | 30                    | 5.00                                   | ..      |
| Mount Hagen .. .. .         | 8.12.64               | 134                                      | 50,784                         | 56                    | 10.00                                  | 1.00    |
| Mul .. .. .                 | 26.11.64              | 80                                       | 14,516                         | 36                    | 10.00                                  | 1.00    |
| Wabag .. .. .               | 26.4.63               | 119                                      | 35,484                         | 34                    | 6.00                                   | 0.50    |
| Wahgi .. .. .               | 8.10.65               | 164                                      | 34,939                         | 48                    | 10.00                                  | ..      |
| Wapenamanda .. .. .         | 20.5.65               | 108                                      | 29,810                         | 31                    | 7.00                                   | ..      |
| <i>Eastern Highlands—</i>   |                       |  |                                |                       |  |         |
| Asaro-Watabung .. .. .      | 14.12.62              | 119                                      | 25,368                         | 39                    | 8.00                                   | 1.00    |
| Goroko .. .. .              | 18.7.63               | 177                                      | 38,000                         | 42                    | 2.00                                   | 0.50    |
| Henganofi .. .. .           | 21.5.62               | 134                                      | 34,731                         | 46                    | 10.00                                  | 1.00    |
| Kainantu .. .. .            | 19.1.66               | 141                                      | 45,311                         | 61                    | 8.00                                   | 1.00    |
| Lamori .. .. .              | 13.7.67               | 23                                       | 5,978                          | 25                    | 5.00                                   | ..      |
| Lufa .. .. .                | 20.5.65               | 142                                      | 28,248                         | 50                    | 8.00                                   | ..      |
| Okapa .. .. .               | 17.6.65               | 133                                      | 41,782                         | 46                    | 7.00                                   | ..      |
| <i>Chimbu—</i>              |                       |  |                                |                       |  |         |
| Elimbari .. .. .            | 8.11.61               | 126                                      | 31,585                         | 41                    | 3.00                                   | ..      |
| Gumine .. .. .              | 23.9.65               | 95                                       | 27,306                         | 38                    | 6.00                                   | 0.60    |
| Kerowagi .. .. .            | 7.7.60                | 162                                      | 31,075                         | 41                    | 3.00                                   | 0.30    |
| Kundiawa .. .. .            | 14.12.67              | 142                                      | 29,539                         | 34                    | 8.00                                   | 1.00    |
| Mount Wilhelm .. .. .       | 28.10.65              | 60                                       | 22,224                         | 30                    | 11.00                                  | 2.00    |
| Sinasina .. .. .            | 17.6.65               | 123                                      | 23,954                         | 34                    | 9.00                                   | 1.00    |
| Salt-Nomane .. .. .         | 17.3.70               | 58                                       | 12,633                         | 33                    | 6.00                                   | 2.00    |
|                             |                       |  |                                |                       | 2.00                                   | 0.20    |

APPENDIX II—continued

8. LOCAL GOVERNMENT COUNCILS: PROCLAMATION DATE, NUMBER OF VILLAGE GROUPS COVERED, POPULATION, NUMBER OF COUNCILLORS AND TAX RATES BY COUNCIL AND DISTRICT AT 30 JUNE 1972—continued

| Council and district        | Date first proclaimed | Number of village groups in council area | Approximate population covered | Number of councillors | Tax rates for year ending 30 June 1972 |         |
|-----------------------------|-----------------------|--|--------------------------------|-----------------------|--|---------|
|                             |                       |  |                                |                       | Males                                  | Females |
|                             |                       |  |                                |                       | \$                                     | \$      |
| <i>New Guinea—continued</i> |                       |  |                                |                       |  |         |
| <i>Madang—</i>              |                       |  |                                |                       |  |         |
| Almami .. .. .              | 23.9.65               | 78                                       | 9,991                          | 37                    | 6.00                                   | ..      |
|                             |                       |  |                                |                       | 4.50                                   | ..      |
|                             |                       |  |                                |                       | 3.00                                   | ..      |
|                             |                       |  |                                |                       | 9.00                                   | ..      |
|                             |                       |  |                                |                       | 8.00                                   | ..      |
| Ambenob .. .. .             | 13.9.56               | 135                                      | 22,981                         | 29                    | 6.00                                   | ..      |
|                             |                       |  |                                |                       | 4.00                                   | ..      |
|                             |                       |  |                                |                       | 3.00                                   | ..      |
|                             |                       |  |                                |                       | 1.50                                   | ..      |
| Arabaka .. .. .             | 17.2.64               | 102                                      | 10,371                         | 35                    | 3.00                                   | ..      |
|                             |                       |  |                                |                       | 5.00                                   | 0.50    |
| Astrolabe Bay .. .. .       | 3.3.66                | 46                                       | 5,739                          | 18                    | 4.00                                   | 0.50    |
|                             |                       |  |                                |                       | 2.00                                   | 0.50    |
|                             |                       |  |                                |                       | 4.00                                   | ..      |
| Bundi .. .. .               | 17.6.65               | 30                                       | 7,601                          | 24                    | 3.00                                   | ..      |
|                             |                       |  |                                |                       | 1.00                                   | ..      |
| Iabu .. .. .                | 14.8.63               | 16                                       | 5,219                          | 16                    | 6.50                                   | ..      |
|                             |                       |  |                                |                       | 3.00                                   | ..      |
| Josephstaal .. .. .         | 26.11.69              | 66                                       | 6,479                          | 18                    | 2.00                                   | ..      |
|                             |                       |  |                                |                       | 1.00                                   | ..      |
|                             |                       |  |                                |                       | 10.00                                  | ..      |
| Karkar .. .. .              | 24.5.63               | 59                                       | 17,206                         | 29                    | 8.00                                   | ..      |
|                             |                       |  |                                |                       | 7.00                                   | ..      |
| Madang Town .. .. .         | 21.1.71               | ..                                       | 9,827                          | 18                    | 10.00                                  | ..      |
| Rai Coast .. .. .           | 21.2.64               | 121                                      | 14,607                         | 33                    | 6.00                                   | ..      |
|                             |                       |  |                                |                       | 4.00                                   | ..      |
| Simbai .. .. .              | 26.11.69              | 56                                       | 16,053                         | 29                    | 1.00                                   | ..      |
|                             |                       |  |                                |                       | 0.50                                   | ..      |
|                             |                       |  |                                |                       | 10.00                                  | ..      |
|                             |                       |  |                                |                       | 5.00                                   | ..      |
| Sumgilbar .. .. .           | 20.10.61              | 60                                       | 10,579                         | 28                    | 4.00                                   | ..      |
|                             |                       |  |                                |                       | 3.00                                   | ..      |
|                             |                       |  |                                |                       | 1.00                                   | ..      |
| Usino .. .. .               | 4.2.67                | 89                                       | 11,207                         | 30                    | 3.00                                   | ..      |
|                             |                       |  |                                |                       | 2.00                                   | ..      |
|                             |                       |  |                                |                       | 6.00                                   | ..      |
| Yawar .. .. .               | 21.3.62               | 98                                       | 15,831                         | 37                    | 5.00                                   | ..      |
|                             |                       |  |                                |                       | 4.00                                   | ..      |
|                             |                       |  |                                |                       | 2.00                                   | ..      |
| <i>Morobe—</i>              |                       |  |                                |                       |  |         |
| Finschhafen .. .. .         | 6.12.57               | 57                                       | 14,682                         | 20                    | 9.00                                   | 0.50    |
| Huon .. .. .                | 19.1.66               | 76                                       | 25,065                         | 25                    | 8.00                                   | 1.00    |
|                             |                       |  |                                |                       | 6.00                                   | ..      |
| Kabwum .. .. .              | 11.5.67               | 97                                       | 31,072                         | 28                    | 5.00                                   | 1.00    |
| Lac Town .. .. .            | 21.1.71               | ..                                       | 19,540                         | 20                    | ..                                     | ..      |
|                             |                       |  |                                |                       | 8.00                                   | ..      |
| Markham .. .. .             | 21.3.60               | 75                                       | 18,592                         | 28                    | 6.00                                   | ..      |
|                             |                       |  |                                |                       | 4.00                                   | ..      |
| Morobe .. .. .              | 7.2.63                | 33                                       | 6,789                          | 20                    | 6.00                                   | 0.80    |
| Mumeng .. .. .              | 25.7.62               | 53                                       | 16,982                         | 33                    | 7.00                                   | 1.00    |
| Nawae .. .. .               | 20.5.65               | 98                                       | 23,425                         | 24                    | 6.00                                   | 0.50    |
| Pindiu .. .. .              | 1.5.62                | 57                                       | 16,308                         | 18                    | 6.00                                   | 0.50    |
| Siassi .. .. .              | 14.7.64               | 37                                       | 8,307                          | 15                    | 6.00                                   | 1.00    |

APPENDIX II—continued

8. LOCAL GOVERNMENT COUNCILS: PROCLAMATION DATE, NUMBER OF VILLAGE GROUPS COVERED, POPULATION, NUMBER OF COUNCILLORS AND TAX RATES BY COUNCIL AND DISTRICT AT 30 JUNE 1972—continued

| Council and district        | Date first proclaimed | Number of village groups in council area | Approximate population covered | Number of councillors | Tax rates for year ending 30 June 1972 |         |
|-----------------------------|-----------------------|--|--------------------------------|-----------------------|--|---------|
|                             |                       |  |                                |                       | Males                                  | Females |
|                             |                       |  |                                |                       | \$                                     | \$      |
| <i>New Guinea—continued</i> |                       |  |                                |                       |  |         |
| <i>Morobe—continued</i>     |                       |  |                                |                       |  |         |
| Tewae .. .. .               | 11.10.66              | 58                                       | 13,088                         | 18                    | 5.00                                   | 0.30    |
| Wantoat .. .. .             | 25.5.65               | 76                                       | 9,212                          | 20                    | 7.00                                   | 1.00    |
| Waria .. .. .               | 22.11.66              | 59                                       | 9,902                          | 23                    | 6.00                                   | 1.00    |
| Watut .. .. .               | 14.12.67              | 21                                       | 4,239                          | 11                    | 4.00                                   | 1.00    |
|                             |                       |  |                                |                       | 7.00                                   | 1.00    |
| <i>West New Britain—</i>    |                       |  |                                |                       |  |         |
| Bali Witu .. .. .           | 11.5.67               | 25                                       | 6,247                          | 18                    | 6.00                                   | ..      |
| Talasea .. .. .             | 16.12.68              | 26                                       | 5,966                          | 17                    | 10.00                                  | 1.00    |
| Gloucester .. .. .          | 7.4.67                | 70                                       | 7,177                          | 24                    | 5.00                                   | 0.50    |
|                             |                       |  |                                |                       | 3.00                                   | ..      |
|                             |                       |  |                                |                       | 10.00                                  | ..      |
| Hoskins .. .. .             | 18.12.67              | 26                                       | 11,921                         | 31                    | 6.00                                   | ..      |
|                             |                       |  |                                |                       | 3.00                                   | ..      |
| Kandrian .. .. .            | 23.9.65               | 77                                       | 9,813                          | 18                    | 7.00                                   | ..      |
|                             |                       |  |                                |                       | 10.00                                  | ..      |
| Nakanai .. .. .             | 11.5.67               | 55                                       | 6,047                          | 18                    | 8.00                                   | ..      |
|                             |                       |  |                                |                       | 4.00                                   | ..      |
| <i>East New Britain—</i>    |                       |  |                                |                       |  |         |
| Bainings .. .. .            | 17.6.65               | 17                                       | 4,225                          | 20                    | 5.00                                   | ..      |
|                             |                       |  |                                |                       | 2.00                                   | ..      |
| Gazelle Peninsula .. .. .   | 4.9.63                | 161                                      | 61,585                         | 35                    | 8.00                                   | ..      |
| Mengen .. .. .              | 25.11.65              | 49                                       | 5,643                          | 19                    | 5.00                                   | ..      |
| Rabaul Town .. .. .         | 16.6.71               | ..                                       | 9,529                          | 21                    | ..                                     | ..      |
| Ramoaina .. .. .            | 16.6.71               | 7  | 2,203                          | 7                     | 3.00                                   | 1.00    |
| <i>Bougainville—</i>        |                       |  |                                |                       |  |         |
| Arawa .. .. .               | 10.12.70              | ..                                       | 5,042                          | 4                     | 12.00                                  | ..      |
| Bana .. .. .                | 26.8.65               | 70                                       | 8,445                          | 28                    | 6.00                                   | 0.60    |
| Buin .. .. .                | 15.7.63               | 94                                       | 9,612                          | 36                    | 7.00                                   | 0.40    |
| Buka .. .. .                | 18.10.61              | 94                                       | 15,017                         | 33                    | 10.00                                  | 1.00    |
|                             |                       |  |                                |                       | 6.00                                   | ..      |
|                             |                       |  |                                |                       | 10.00                                  | 0.20    |
| Kieta .. .. .               | 14.7.64               | 64                                       | 9,699                          | 35                    | 4.00                                   | 0.20    |
|                             |                       |  |                                |                       | 8.00                                   | ..      |
| Siwai .. .. .               | 24.12.59              | 62                                       | 6,062                          | 22                    | 10.00                                  | ..      |
| Teop-Tinputz .. .. .        | 1.5.58                | 42                                       | 6,141                          | 24                    | 10.00                                  | ..      |
| Wakunai .. .. .             | 31.12.63              | 26                                       | 4,207                          | 21                    | 10.00                                  | ..      |
| <i>New Ireland—</i>         |                       |  |                                |                       |  |         |
| Central New Ireland .. .. . | 11.10.62              | 91                                       | 9,003                          | 18                    | 9.00                                   | 2.50    |
| Lavengai .. .. .            | 29.11.60              | 60                                       | 9,022                          | 24                    | 6.00                                   | ..      |
| Mussau-Emira .. .. .        | 1.6.67                | 23                                       | 3,639                          | 11                    | 4.00                                   | ..      |
|                             |                       |  |                                |                       | 8.00                                   | 1.50    |
|                             |                       |  |                                |                       | 7.00                                   | 2.00    |
| Namatanai .. .. .           | 16.12.63              | 152                                      | 19,192                         | 42                    | 6.00                                   | 2.00    |
|                             |                       |  |                                |                       | 5.00                                   | 1.00    |
| Tikana .. .. .              | 30.10.56              | 67                                       | 9,027                          | 15                    | 10.00                                  | ..      |
| <i>Manus—</i>               |                       |  |                                |                       |  |         |
| Manus .. .. .               | 12.9.62               | 118                                      | 23,304                         | 33                    | 8.00                                   | ..      |
| <b>Total</b> .. .. .        | ..                    | 7,503                                    | 1,622,497                      | 2,924                 |  |         |

## 9. ANALYSIS OF EXPENDITURE BY LOCAL GOVERNMENT COUNCILS BY DISTRICT AND TYPE OF EXPENDITURE DURING YEAR ENDED 30 JUNE 1971

## Papua

| District              | General services | Development  |                          | Transport and communication |           | Social services |                    | Miscellaneous       |        | Special appropriation             |                                    |                                       | Totals     |
|-----------------------|------------------|--------------|--------------------------|-----------------------------|-----------|-----------------|--------------------|---------------------|--------|-----------------------------------|------------------------------------|---------------------------------------|------------|
|                       |                  | Water supply | Forestry and agriculture | Roads and bridges           | Other     | Education       | Health and welfare | General maintenance | Other  | Reserve and accumulation accounts | Establishment of business ventures | Repayment of loan principal and other |            |
| Central .. ..         | \$ 69,059        | \$ 20,062    | \$ 7,037                 | \$ 73,822                   | \$ 30,858 | \$ 7,438        | \$ 20,284          | \$ 4,327            | \$ 927 | \$ 29,678                         | \$ ..                              | \$ 7,647                              | \$ 271,139 |
| Gulf .. ..            | 30,446           | 9,977        | 774                      | 2,127                       | 33,665    | 5,421           | 13,635             | 3,649               | 153    | 4,158                             | ..                                 | ..                                    | 104,005    |
| Milne Bay .. ..       | 54,677           | 11,697       | 8,565                    | 30,259                      | 35,215    | 21,769          | 27,246             | 9,025               | 3,310  | 14,391                            | ..                                 | 3,750                                 | 219,904    |
| Northern .. ..        | 47,169           | 884          | 2,562                    | 29,405                      | 29,884    | 4,577           | 13,362             | 890                 | 204    | 6,198                             | 4,000                              | 7,568                                 | 146,703    |
| Western .. ..         | 16,656           | 14,980       | 12,681                   | 26,616                      | 33,226    | 2,028           | 3,362              | 10,722              | 1,753  | 4,176                             | 2,000                              | 750                                   | 128,950    |
| Southern Highlands .. | 55,095           | 2,242        | 48,708                   | 157,124                     | 64,551    | 38,174          | 17,521             | 462                 | 585    | 11,930                            | 6,561                              | 6,727                                 | 409,680    |
| Total .. ..           | 273,102          | 59,842       | 80,327                   | 319,353                     | 227,399   | 79,407          | 95,410             | 29,075              | 6,932  | 70,531                            | 12,561                             | 26,442                                | 1,280,381  |

## New Guinea

| District             | General services | Development  |                          | Transport and communication |           | Social services |                    | Miscellaneous       |         | Special appropriation             |                                    |                                       | Totals     |
|----------------------|------------------|--------------|--------------------------|-----------------------------|-----------|-----------------|--------------------|---------------------|---------|-----------------------------------|------------------------------------|---------------------------------------|------------|
|                      |                  | Water supply | Forestry and agriculture | Roads and bridges           | Other     | Education       | Health and welfare | General maintenance | Other   | Reserve and accumulation accounts | Establishment of business ventures | Repayment of loan principal and other |            |
| East Sepik .. ..     | \$ 126,182       | \$ 297       | \$ 8,098                 | \$ 96,457                   | \$ 15,011 | \$ 10,279       | \$ 20,444          | \$ ..               | \$ 804  | \$ 11,528                         | \$ ..                              | \$ 12,548                             | \$ 301,648 |
| West Sepik .. ..     | 26,885           | 8,826        | 7,970                    | 54,495                      | 11,312    | 6,021           | 6,440              | ..                  | 995     | 4,263                             | ..                                 | 500                                   | 127,707    |
| Western Highlands .. | 243,741          | 1,069        | 33,936                   | 351,329                     | 165,228   | 70,394          | 44,374             | 7,111               | 59,518  | 39,618                            | 18,389                             | 50,120                                | 1,084,827  |
| Eastern Highlands .. | 224,035          | 27,026       | 31,033                   | 309,727                     | 263,589   | 64,742          | 62,417             | 4,289               | 104,377 | 12,378                            | 99,933                             | 19,162                                | 1,222,708  |
| Chimbu .. ..         | 84,150           | ..           | 22,090                   | 59,243                      | 55,100    | 80,610          | 28,482             | 2,290               | 11,625  | 29,311                            | 4,348                              | 20,840                                | 398,089    |
| Madang .. ..         | 50,872           | 9,757        | 1,500                    | 147,254                     | 32,364    | 10,075          | 21,876             | ..                  | 29      | 14,919                            | 12,848                             | 10,535                                | 312,029    |
| Morobe .. ..         | 91,156           | 25,735       | 4,994                    | 178,085                     | 35,213    | 16,551          | 31,945             | ..                  | 1,846   | 13,357                            | ..                                 | 28,397                                | 427,279    |
| West New Britain ..  | 26,796           | 9,468        | 1,889                    | 35,114                      | 9,607     | 1,444           | 8,176              | ..                  | 1,044   | 5,134                             | ..                                 | 5,671                                 | 104,343    |
| East New Britain ..  | 33,839           | 11,858       | 6,068                    | 44,679                      | 9,455     | 5,171           | 13,219             | ..                  | 308     | 1,137                             | ..                                 | 1,200                                 | 126,934    |
| Bougainville .. ..   | 65,403           | 8,470        | 2,726                    | 137,717                     | 35,236    | 3,159           | 10,400             | ..                  | 2,342   | 9,346                             | ..                                 | 7,664                                 | 282,463    |
| New Ireland .. ..    | 38,975           | 24,726       | 4,592                    | 70,025                      | 15,092    | 13,004          | 19,749             | ..                  | 2,339   | 11,773                            | ..                                 | ..                                    | 200,275    |
| Manus .. ..          | 23,407           | 1,291        | 1,806                    | 8,188                       | 2,178     | 372             | 6,300              | ..                  | 389     | ..                                | ..                                 | ..                                    | 43,931     |
| Total .. ..          | 1,035,441        | 128,523      | 126,702                  | 1,492,313                   | 649,385   | 281,822         | 273,822            | 13,690              | 185,616 | 152,764                           | 135,518                            | 156,637                               | 4,632,233  |

## Papua New Guinea—Summary

| Type of Expenditure                   | 1970-71 Expenditure |           |           |
|---------------------------------------|---------------------|-----------|-----------|
|                                       | New Guinea          | Papua     | Total     |
|                                       | \$                  | \$        | \$        |
| General Services—                     |                     |           |           |
| Council Administration .. .. .        | 970,338             | 273,102   | 1,243,440 |
| Other Items .. .. .                   | 65,103              | ..        | 65,103    |
|                                       | 1,035,441           | 273,102   | 1,308,543 |
| Development—                          |                     |           |           |
| Forestry .. .. .                      | 28,944              | 12,700    | 41,644    |
| Agriculture .. .. .                   | 100,458             | 67,627    | 168,085   |
| Water Supply .. .. .                  | 128,523             | 59,842    | 188,365   |
|                                       | 257,925             | 140,169   | 398,094   |
| Transport and Communications—         |                     |           |           |
| Roads, Bridges, etc. .. .. .          | 1,492,313           | 319,353   | 1,811,666 |
| Communications .. .. .                | 2,584               | 21,158    | 23,742    |
| Transport .. .. .                     | 646,801             | 206,241   | 853,042   |
|                                       | 2,141,698           | 546,752   | 2,688,450 |
| Social Services—                      |                     |           |           |
| Education .. .. .                     | 281,822             | 79,407    | 361,229   |
| Welfare .. .. .                       | 31,005              | 30,853    | 61,858    |
| Health .. .. .                        | 242,817             | 64,557    | 307,374   |
|                                       | 555,644             | 174,817   | 730,461   |
| Special Appropriations—               |                     |           |           |
| Accumulation Accounts .. .. .         | 27,983              | 22,095    | 50,078    |
| Business Ventures .. .. .             | 135,518             | 12,561    | 148,079   |
| Repayment of Loans .. .. .            | 146,206             | 23,795    | 174,001   |
| Other .. .. .                         | 10,431              | 2,647     | 13,078    |
|                                       | 320,138             | 61,098    | 385,236   |
| Miscellaneous—                        |                     |           |           |
| General Maintenance .. .. .           | 13,690              | 29,075    | 42,765    |
| Tools .. .. .                         | 92                  | 4,763     | 4,855     |
| Other .. .. .                         | 185,524             | 2,169     | 187,693   |
|                                       | 199,306             | 36,007    | 235,313   |
| Grand Total .. .. .                   | 4,507,452           | 1,231,945 | 5,739,397 |
| Reserve Account Contributions .. .. . | 124,781             | 48,436    | 173,217   |

Note: Figures for year ended 30 June 1972 are not yet available.

## 10. ANALYSIS OF LOCAL GOVERNMENT REVENUE BY DISTRICT AND TYPE OF EXPENDITURE DURING YEAR ENDED 30 JUNE 1971

## Papua

| Districts          | Recurrent revenue      |                     |                                 |                 |                          |                           |                         | Non-recurrent revenue |                      |           |        |        |           |               | Total revenue |                             |
|--------------------|------------------------|---------------------|---------------------------------|-----------------|--------------------------|---------------------------|-------------------------|-----------------------|----------------------|-----------|--------|--------|-----------|---------------|---------------|-----------------------------|
|                    | Goods and services     |                     |                                 | Property income | Taxation                 |                           | Total recurrent revenue | Property conversion   | Grants and subsidies |           |        |        | Borrowing | Miscellaneous |               | Total non-recurrent revenue |
|                    | Council fees and fines | Charge for services | Profits of business enterprises |                 | Applying to current year | Applying to previous year |                         |                       | Public works         | Education | Health | Other  |           |               |               |                             |
|                    | \$                     | \$                  | \$                              | \$              | \$                       | \$                        | \$                      | \$                    | \$                   | \$        | \$     | \$     | \$        | \$            | \$            | \$                          |
| Central ..         | 12,931                 | 4,608               | 2,039                           | 4,434           | 112,019                  | 6,003                     | 142,034                 | 1,332                 | 63,230               | 500       | 1,900  | 10,445 | ..        | 8,458         | 85,865        | 227,899                     |
| Gulf ..            | 7,507                  | 9,842               | 576                             | 1,691           | 58,045                   | 8,644                     | 86,305                  | 833                   | 2,886                | 2,400     | 1,904  | 3,070  | ..        | 4,106         | 15,199        | 101,504                     |
| Milne Bay ..       | 5,364                  | 12,005              | 10,265                          | 1,762           | 115,541                  | 7,107                     | 152,044                 | 7,705                 | 43,392               | 700       | 4,857  | 14,455 | 2,500     | 2,058         | 75,667        | 227,711                     |
| Northern ..        | 5,754                  | 7,185               | 2,747                           | 1,433           | 50,785                   | 1,967                     | 69,871                  | 9,171                 | 39,408               | 2,800     | 4,031  | 3,897  | ..        | 25,418        | 84,725        | 154,596                     |
| Western ..         | 1,413                  | 16,502              | 19,043                          | 252             | 33,874                   | 3,570                     | 74,654                  | 14,300                | 35,420               | 440       | 807    | 15,703 | ..        | 7,007         | 73,677        | 148,331                     |
| Southern Highlands | 15,056                 | 57,446              | 10,645                          | 1,042           | 131,332                  | 2,051                     | 217,572                 | 15,007                | 164,618              | 5,600     | 950    | 5,595  | 4,000     | 8,847         | 204,617       | 422,189                     |
| Total ..           | 48,025                 | 107,588             | 45,315                          | 10,614          | 501,596                  | 29,342                    | 742,480                 | 48,348                | 348,954              | 12,440    | 14,449 | 53,165 | 6,500     | 55,894        | 539,750       | 1,282,230                   |

## New Guinea

| Districts           | Recurrent revenue      |                     |                                 |                 |                          |                           |                         | Non-recurrent revenue |                      |           |        |        |           |               | Total revenue |                             |
|---------------------|------------------------|---------------------|---------------------------------|-----------------|--------------------------|---------------------------|-------------------------|-----------------------|----------------------|-----------|--------|--------|-----------|---------------|---------------|-----------------------------|
|                     | Goods and services     |                     |                                 | Property income | Taxation                 |                           | Total recurrent revenue | Property conversion   | Grants and subsidies |           |        |        | Borrowing | Miscellaneous |               | Total non-recurrent revenue |
|                     | Council fees and fines | Charge for services | Profits of business enterprises |                 | Applying to current year | Applying to previous year |                         |                       | Public works         | Education | Health | Other  |           |               |               |                             |
|                     | \$                     | \$                  | \$                              | \$              | \$                       | \$                        | \$                      | \$                    | \$                   | \$        | \$     | \$     | \$        | \$            | \$            | \$                          |
| East Sepik ..       | 8,243                  | 16,088              | 6,578                           | 1,728           | 133,206                  | 3,717                     | 169,560                 | 611                   | 69,442               | ..        | 5,346  | 21,000 | 40,450    | 5,702         | 142,551       | 312,111                     |
| West Sepik ..       | 2,629                  | 3,590               | 1,005                           | 2,500           | 45,732                   | 2,025                     | 57,481                  | 743                   | 61,880               | 2,051     | 4,491  | 15,434 | 5,000     | 6,539         | 96,138        | 153,619                     |
| Western Highlands   | 32,715                 | 225,122             | 17,452                          | 7,809           | 511,397                  | 10,155                    | 804,650                 | 23,820                | 228,897              | 10,500    | 12,754 | 2,054  | 16,000    | 10,108        | 304,133       | 1,108,783                   |
| Eastern Highlands   | 93,913                 | 327,627             | 7,896                           | 12,721          | 238,331                  | 8,698                     | 689,186                 | 43,175                | 307,650              | 6,300     | 19,522 | 5,415  | 134,680   | 10,327        | 527,069       | 1,216,255                   |
| Chimbu ..           | 17,850                 | 18,700              | 1,452                           | 5,841           | 256,414                  | 6,507                     | 306,764                 | 21,217                | 62,757               | 3,500     | 5,469  | 4,500  | 8,000     | 1,766         | 107,209       | 413,973                     |
| Madang ..           | 4,677                  | 13,320              | 2,674                           | 4,994           | 118,272                  | 6,941                     | 150,578                 | 682                   | 111,655              | 1,671     | 7,651  | 8,177  | 17,000    | 23,937        | 170,773       | 321,651                     |
| Morobe ..           | 10,770                 | 31,467              | 2,227                           | 15,116          | 165,983                  | 9,289                     | 234,852                 | 6,284                 | 123,808              | 1,400     | 10,525 | 15,371 | 6,706     | 7,284         | 171,378       | 406,230                     |
| West New Britain .. | 3,341                  | 3,654               | 951                             | 948             | 44,514                   | 879                       | 54,287                  | ..                    | 30,750               | 700       | ..     | 23,314 | 1,419     | 5,284         | 61,467        | 115,754                     |
| East New Britain .. | 8,719                  | 2,798               | ..                              | 7,467           | 17,112                   | 867                       | 36,963                  | ..                    | 39,112               | ..        | 5,698  | 21,514 | ..        | 477           | 66,801        | 103,764                     |
| Bougainville ..     | 5,516                  | 6,759               | 9,098                           | 6,794           | 68,864                   | 4,182                     | 101,213                 | 3,866                 | 91,072               | 700       | 4,683  | 21,186 | 20,944    | 41,716        | 184,167       | 185,380                     |
| New Ireland ..      | 13,206                 | 7,712               | 241                             | 1,933           | 77,098                   | 2,515                     | 102,705                 | 6,239                 | 29,772               | 1,400     | 14,883 | 23,465 | 30,160    | 5,322         | 111,241       | 213,946                     |
| Manus ..            | 3,026                  | 3,179               | ..                              | 4,146           | 21,433                   | 587                       | 22,371                  | ..                    | 8,411                | ..        | 3,227  | ..     | ..        | 706           | 16,105        | 48,476                      |
| Total ..            | 204,605                | 660,016             | 49,574                          | 71,997          | 1,698,356                | 56,362                    | 2,740,910               | 88,212                | 599,304              | 20,300    | 37,745 | 11,969 | 158,680   | 22,201        | 1,959,032     | 4,699,942                   |

## APPENDIX II—continued

## Papua New Guinea—Summary

| Type of Revenue                        | New Guinea | Papua     | Total     |
|--|------------|-----------|-----------|
|  | \$         | \$        | \$        |
| Taxation—                              |            |           |           |
| Current year's tax .. .. .             | 1,698,356  | 501,596   | 2,199,952 |
| Previous year's tax .. .. .            | 56,362     | 29,342    | 85,704    |
|  | 1,754,718  | 530,938   | 2,285,656 |
| Goods and services—                    |            |           |           |
| Fees .. .. .                           | 178,542    | 26,929    | 205,471   |
| Fines .. .. .                          | 26,063     | 21,096    | 47,159    |
| Charges for services .. .. .           | 660,016    | 107,588   | 767,604   |
| Profit of business enterprises .. .. . | 49,574     | 45,315    | 94,889    |
|  | 914,195    | 200,928   | 1,115,123 |
| Property income—                       |            |           |           |
| Interest .. .. .                       | 20,443     | 7,785     | 28,228    |
| Rent and other .. .. .                 | 29,899     | 2,829     | 32,728    |
|  | 50,342     | 10,614    | 60,956    |
| Grants and subsidies—                  |            |           |           |
| Low income .. .. .                     | 4,500      | 4,000     | 8,500     |
| Public works .. .. .                   | 1,165,206  | 348,954   | 1,514,160 |
| Education .. .. .                      | 28,222     | 12,440    | 40,662    |
| Health .. .. .                         | 94,783     | 14,449    | 109,232   |
| Water supply .. .. .                   | 61,281     | 33,673    | 94,954    |
| Other .. .. .                          | 98,876     | 15,492    | 114,368   |
|  | 1,452,868  | 429,008   | 1,881,876 |
| Miscellaneous .. .. .                  | 119,168    | 55,894    | 175,062   |
| Utilisation of reserves .. .. .        | 106,637    | 48,348    | 154,985   |
| Borrowing—                             |            |           |           |
| Bank loans .. .. .                     | 280,359    | 6,500     | 286,859   |
| Other .. .. .                          | ..         | ..        | ..        |
|  | 280,359    | 6,500     | 286,859   |
| Total .. .. .                          | 4,691,840  | 1,282,230 | 5,974,070 |
| Carry over from previous year .. .. .  | 240,199    | 137,804   | 378,003   |
| Grand Total .. .. .                    | 4,932,039  | 1,420,034 | 6,352,073 |

Note: Figures for year ended 30 June 1972 are not yet available.

11. LOCAL GOVERNMENT COUNCILS: ELECTORS ENROLLED, AVAILABLE TO VOTE AND PER CENT VOTING IN GENERAL ELECTIONS BY REGION AND DISTRICT DURING YEAR ENDED 30 JUNE 1971

| Region and district            | Total population | Electors enrolled |         |           | General elections (contested wards only) |         |           |                 |         |           | Per cent interest<br>col. B x 100<br>Col. A |
|--------------------------------|------------------|-------------------|---------|-----------|--|---------|-----------|-----------------|---------|-----------|---|
|                                |                  | Males             | Females | Persons   | Electors available to vote               |         |           | Electors voting |         |           |   |
|                                |                  |                   |         |           | Males                                    | Females | Persons A | Males           | Females | Persons B |   |
| <i>New Guinea</i>              |                  |                   |         |           |  |         |           |                 |         |           |   |
| Mainland—                      |                  |                   |         |           |  |         |           |                 |         |           |   |
| Madang .. .. .                 | 164,198          | 53,234            | 40,306  | 93,540    | 8,321                                    | 7,799   | 16,120    | 7,037           | 6,518   | 13,555    | 84.1  |
| Morobe .. .. .                 | 217,550          | 52,360            | 52,258  | 104,618   | 10,690                                   | 13,271  | 23,961    | 8,842           | 10,608  | 19,450    | 81.2  |
| East Sepik .. .. .             | 187,926          | 51,387            | 45,122  | 96,509    | 18,053                                   | 17,771  | 35,824    | 12,512          | 12,458  | 24,970    | 69.7  |
| West Sepik .. .. .             | 82,228           | 24,971            | 19,962  | 44,933    | 5,247                                    | 4,449   | 9,696     | 4,802           | 4,202   | 9,004     | 92.8  |
| Regional Total .. .. .         | 651,902          | 181,952           | 157,648 | 339,600   | 42,311                                   | 43,290  | 85,601    | 33,193          | 33,786  | 66,979    | 78.2  |
| Islands—                       |                  |                   |         |           |  |         |           |                 |         |           |   |
| Bougainville .. .. .           | 59,118           | 15,644            | 13,489  | 29,133    | 9,868                                    | 9,340   | 19,208    | 5,177           | 4,832   | 10,009    | 52.1  |
| East New Britain .. .. .       | 78,867           | 22,900            | 16,232  | 39,132    | 1,385                                    | 1,426   | 2,811     | 1,161           | 1,116   | 2,277     | 81.0  |
| Manus .. .. .                  | 23,304           | 6,153             | 5,213   | 11,366    | 4,758                                    | 4,508   | 9,266     | 1,821           | 1,986   | 3,807     | 41.0  |
| New Ireland .. .. .            | 49,883           | 15,114            | 11,733  | 26,847    | 618                                      | 635     | 1,253     | 395             | 389     | 784       | 62.5  |
| West New Britain .. .. .       | 49,724           | 12,332            | 10,521  | 22,853    | 3,876                                    | 3,776   | 7,652     | 2,764           | 2,380   | 5,144     | 67.3  |
| Regional Total .. .. .         | 260,896          | 72,143            | 57,188  | 129,331   | 20,505                                   | 19,685  | 40,190    | 11,318          | 10,703  | 22,021    | 54.7  |
| Highlands—                     |                  |                   |         |           |  |         |           |                 |         |           |   |
| Chimbu .. .. .                 | 181,907          | 57,095            | 46,775  | 103,870   | 41,652                                   | 39,144  | 80,796    | 29,766          | 25,137  | 54,903    | 67.9  |
| Eastern Highlands .. .. .      | 231,567          | 55,565            | 49,816  | 105,381   | 41,888                                   | 44,832  | 86,720    | 29,863          | 24,405  | 54,268    | 62.5  |
| Western Highlands .. .. .      | 306,773          | 80,995            | 72,538  | 153,533   | 61,133                                   | 55,044  | 116,177   | 55,353          | 47,399  | 102,752   | 88.4  |
| Highlands Sub-total .. .. .    | 720,247          | 193,655           | 169,129 | 362,784   | 144,673                                  | 139,020 | 283,693   | 114,982         | 96,941  | 211,923   | 74.7  |
| New Guinea Total .. .. .       | 1,633,045        | 447,750           | 383,965 | 831,715   | 207,489                                  | 201,995 | 409,484   | 159,493         | 141,430 | 300,923   | 73.5  |
| <i>Papua</i>                   |                  |                   |         |           |  |         |           |                 |         |           |   |
| Southern Highlands .. .. .     | 199,903          | 54,449            | 53,241  | 107,690   | 40,792                                   | 44,716  | 85,508    | 35,426          | 39,305  | 74,731    | 87.4  |
| Highlands Total* .. .. .       | 920,150          | 248,104           | 222,370 | 470,474   | 185,465                                  | 183,736 | 369,201   | 150,408         | 136,246 | 286,654   | 77.6  |
| Central .. .. .                | 124,082          | 26,395            | 24,185  | 50,579    | 13,099                                   | 8,634   | 21,733    | 8,126           | 5,447   | 13,573    | 62.4  |
| Gulf .. .. .                   | 20,625           | 4,833             | 3,877   | 8,710     | 3,297                                    | 3,009   | 6,306     | 2,106           | 2,270   | 4,376     | 69.4  |
| Milne Bay .. .. .              | 39,974           | 11,339            | 9,116   | 20,455    | 7,440                                    | 6,558   | 13,998    | 4,334           | 3,728   | 8,062     | 57.6  |
| Northern .. .. .               | 38,368           | 9,040             | 7,256   | 16,296    | 4,905                                    | 4,241   | 9,146     | 3,874           | 3,502   | 7,376     | 80.6  |
| Western .. .. .                | 31,028           | 7,432             | 7,655   | 14,087    | 5,605                                    | 6,189   | 11,794    | 4,532           | 4,811   | 8,811     | 74.7  |
| Regional Total .. .. .         | 254,077          | 59,039            | 52,089  | 110,127   | 34,346                                   | 28,631  | 62,977    | 22,719          | 19,479  | 42,198    | 67.0  |
| Papua Total .. .. .            | 453,980          | 113,488           | 105,330 | 217,817   | 75,138                                   | 73,347  | 148,485   | 58,145          | 58,784  | 116,929   | 78.7  |
| Papua New Guinea Total .. .. . | 2,087,025        | 561,238           | 489,295 | 1,049,532 | 282,627                                  | 275,342 | 557,969   | 217,638         | 200,214 | 417,852   | 74.9  |

\* This is Highlands Total for the whole of Papua New Guinea.

Note: Figures for year ended 30 June 1972 are not yet available.



APPENDIX II—continued

11A. LOCAL GOVERNMENT COUNCILS: VOTING STATISTICS FOR YEAR ENDED 30 JUNE 1971

| District                   | Total number of electors enrolled in all Councils at 30 June |         |         |         | Number of general elections conducted | Number of electors enrolled and available to vote in Councils conducting elections during year(a) |         |         | Number of electors who voted during year(b) |         |         | Proportion of available voters actually voting |
|----------------------------|--|---------|---------|---------|---------------------------------------|---|---------|---------|---|---------|---------|--|
|                            | 1971   |         |         | 1970    |                                       | Males   | Females | Persons | Males                                       | Females | Persons |  |
|                            | Males  | Females | Persons | Persons |                                       |   |         |         |   |         |         |  |
|                            |  |         |         |         |                                       |   |         |         |   |         |         | %  |
| <i>Papua</i>               |  |         |         |         |                                       |   |         |         |   |         |         |  |
| Central .. .. .            | 26,395   | 24,185  | 50,579  | 47,023  | 6                                     | 13,099  | 8,634   | 21,733  | 8,126                                       | 5,447   | 13,573  | 62.4   |
| Gulf .. .. .               | 4,833  | 3,877   | 8,710   | 8,406   | 3                                     | 3,297   | 3,009   | 6,306   | 2,106                                       | 2,270   | 4,376   | 69.4   |
| Milne Bay .. .. .          | 11,339   | 9,116   | 20,455  | 19,946  | 5                                     | 7,440   | 6,558   | 13,998  | 4,334                                       | 3,728   | 8,062   | 57.6   |
| Northern .. .. .           | 9,040  | 7,256   | 16,296  | 15,408  | 3                                     | 4,905   | 4,241   | 9,146   | 3,874                                       | 3,502   | 7,376   | 80.6   |
| Southern Highlands .. .. . | 54,449   | 53,241  | 107,690 | 104,315 | 4                                     | 40,792  | 44,716  | 85,508  | 35,426                                      | 39,305  | 74,731  | 87.4   |
| Western .. .. .            | 7,432  | 7,655   | 14,087  | 13,721  | 5                                     | 5,605   | 6,189   | 11,794  | 4,279                                       | 4,532   | 8,811   | 74.7   |
| Total .. .. .              | 113,488  | 105,330 | 217,817 | 208,819 | 26                                    | 75,138  | 73,347  | 148,485 | 58,145                                      | 58,784  | 116,929 | 78.7   |
| <i>New Guinea</i>          |  |         |         |         |                                       |   |         |         |   |         |         |  |
| East Sepik .. .. .         | 51,387   | 45,122  | 96,509  | 94,915  | 5                                     | 18,053  | 17,771  | 35,824  | 12,512                                      | 12,458  | 24,970  | 69.7   |
| West Sepik .. .. .         | 24,971   | 19,962  | 44,933  | 44,713  | 5                                     | 5,247   | 4,449   | 9,696   | 4,802                                       | 4,202   | 9,004   | 92.8   |
| Western Highlands .. .. .  | 80,995   | 72,538  | 153,533 | 124,268 | 6                                     | 61,133  | 55,044  | 116,177 | 55,353                                      | 47,399  | 102,752 | 88.4   |
| Eastern Highlands .. .. .  | 55,565   | 49,816  | 105,381 | 102,599 | 4                                     | 41,888  | 44,832  | 86,720  | 29,863                                      | 24,405  | 54,268  | 62.5   |
| Chimbu .. .. .             | 57,095   | 46,775  | 103,870 | 96,566  | 3                                     | 41,652  | 39,144  | 80,796  | 29,766                                      | 25,137  | 54,903  | 67.9   |
| Madang .. .. .             | 53,234   | 40,306  | 93,540  | 81,693  | 7                                     | 8,321   | 7,799   | 16,120  | 7,037                                       | 6,518   | 13,555  | 84.1   |
| Morobe .. .. .             | 52,360   | 52,258  | 104,618 | 89,452  | 8                                     | 10,690  | 13,271  | 23,961  | 8,842                                       | 10,608  | 19,450  | 81.2   |
| West New Britain .. .. .   | 12,332   | 10,521  | 22,853  | 20,932  | 2                                     | 3,876   | 3,776   | 7,652   | 2,764                                       | 2,380   | 5,144   | 62.7   |
| East New Britain .. .. .   | 22,900   | 16,232  | 39,132  | 38,373  | 1                                     | 1,385   | 1,426   | 2,811   | 1,161                                       | 1,116   | 2,277   | 81.0   |
| Bougainville .. .. .       | 15,644   | 13,489  | 29,133  | 26,276  | 6                                     | 9,868   | 9,340   | 19,208  | 5,177                                       | 4,832   | 10,009  | 52.1   |
| New Ireland .. .. .        | 15,114   | 11,733  | 26,847  | 26,696  | 1                                     | 618   | 635     | 1,253   | 395   | 389     | 784     | 62.5   |
| Manus .. .. .              | 6,153  | 5,213   | 11,366  | 11,442  | 2                                     | 4,758   | 4,508   | 9,266   | 1,821                                       | 1,986   | 3,807   | 41.0   |
| Total .. .. .              | 447,750  | 383,965 | 831,715 | 757,925 | 50                                    | 207,489   | 201,995 | 409,484 | 159,493                                     | 141,430 | 300,923 | 73.5   |

(a) Excludes voting at by-elections. (b) Voting is not compulsory and postal voting is not available.

APPENDIX II—continued

12. ETHNIC COMPOSITION OF DISTRICT ADVISORY COUNCILS AT 30 JUNE 1972

| District                        | European |      | Asian |      | Mixed race |      | Indigenous |      | Total |      |
|---------------------------------|----------|------|-------|------|------------|------|------------|------|-------|------|
|                                 | 1971     | 1972 | 1971  | 1972 | 1971       | 1972 | 1971       | 1972 | 1971  | 1972 |
| <i>Papua</i>                    |          |      |       |      |            |      |            |      |       |      |
| Western ..                      | 6        | 6    | ..    | ..   | 1          | 1    | 8          | 8    | 15    | 15   |
| Gulf ..                         | 6        | 6    | ..    | ..   | ..         | ..   | 9          | 9    | 15    | 15   |
| Central ..                      | 8        | 8    | ..    | ..   | 1          | 1    | 11         | 11   | 20    | 20   |
| Southern Highlands              | 7        | 4    | ..    | ..   | ..         | ..   | 8          | 5    | 15    | 9    |
| Milne Bay ..                    | 7        | 7    | ..    | ..   | 2          | 2    | 11         | 11   | 20    | 20   |
| Northern ..                     | 8        | 8    | ..    | ..   | ..         | ..   | 11         | 8    | 19    | 16   |
| Total for Papua                 | 42       | 39   | ..    | ..   | 4          | 4    | 58         | 52   | 104   | 95   |
| <i>New Guinea</i>               |          |      |       |      |            |      |            |      |       |      |
| East Sepik ..                   | 5        | 5    | 1     | 1    | ..         | ..   | 11         | 10   | 17    | 16   |
| West Sepik ..                   | 6        | 4    | ..    | ..   | ..         | ..   | 6          | 9    | 12    | 13   |
| Western Highlands               | 4        | 3    | ..    | ..   | ..         | ..   | 10         | 11   | 14    | 14   |
| Eastern Highlands               | 7        | 5    | ..    | ..   | ..         | ..   | 14         | 14   | 21    | 19   |
| Chimbu ..                       | 6        | 5    | ..    | ..   | ..         | ..   | 8          | 9    | 14    | 14   |
| Madang ..                       | 4        | 4    | 1     | 1    | 1          | 2    | 8          | 7    | 14    | 14   |
| Morobe ..                       | 6        | 3    | 1     | 1    | ..         | ..   | 14         | 10   | 21    | 14   |
| West New Britain                | 5        | 6    | ..    | 1    | ..         | ..   | 7          | 8    | 12    | 15   |
| East New Britain                | 6        | 6    | 1     | 1    | 1          | 1    | 13         | 10   | 21    | 18   |
| Bougainville ..                 | 4        | 4    | ..    | ..   | ..         | ..   | 12         | 12   | 16    | 16   |
| New Ireland ..                  | 7        | 6    | 1     | 1    | ..         | ..   | 9          | 7    | 17    | 14   |
| Manus ..                        | 6        | 6    | 1     | 1    | ..         | ..   | 9          | 9    | 16    | 16   |
| Total for New Guinea ..         | 66       | 57   | 6     | 7    | 2          | 3    | 121        | 116  | 195   | 183  |
| Grand Total Papua New Guinea .. | 108      | 96   | 6     | 7    | 6          | 7    | 179        | 168  | 299   | 278  |

Note: Ex-officio members not shown. Members of the House of Assembly are ex-officio members of District Advisory Councils in their home Districts. District Commissioners are ex-officio members of DAC in their Districts.

13. ETHNIC COMPOSITION OF TOWN ADVISORY COUNCILS AT 30 JUNE 1972

| District           | Town          | European |              | Asian | Mixed race | Indigenous | Total |
|--------------------|---------------|----------|--------------|-------|------------|------------|-------|
|                    |               | Official | Non-official |       |            |            |       |
| <i>New Guinea—</i> |               |          |              |       |            |            |       |
| Morobe ..          | Wau/Bulolo .. | 2        | 6            | ..    | ..         | 7          | 15    |
| New Ireland ..     | Kavieng ..    | 2        | 4            | 2     | ..         | 4          | 12    |
| Total ..           | .. ..         | 4        | 10           | 2     | ..         | 11         | 27    |

Note: There are no Town Advisory Councils in Papua.

14. NUMBER OF COUNCILS, NUMBER OF COUNCILLORS AND  
APPROXIMATE POPULATION IN COUNCIL AREAS AT 30 JUNE 1968 TO 1972

| Year ended 30 June | Number of councils | Number of councillors | Approximate population in council areas |
|--------------------|--------------------|-----------------------|---|
| 1968—              |                    |                       |   |
| Papua .. .. .      | 52                 | 1,340                 | 503,551                                 |
| New Guinea .. .. . | 90                 | 2,749                 | 1,355,013                               |
| 1969—              |                    |                       |   |
| Papua .. .. .      | 52                 | 1,328                 | 518,001                                 |
| New Guinea .. .. . | 90                 | 2,711                 | 1,446,718                               |
| 1970—              |                    |                       |   |
| Papua .. .. .      | 52                 | 1,325                 | 539,109                                 |
| New Guinea .. .. . | 93                 | 2,810                 | 1,511,123                               |
| 1971—              |                    |                       |   |
| Papua .. .. .      | 55                 | 1,376                 | 607,942                                 |
| New Guinea .. .. . | 98                 | 2,904                 | 1,609,682                               |
| 1972—              |                    |                       |   |
| Papua .. .. .      | 60                 | 1,449                 | 647,737                                 |
| New Guinea .. .. . | 99                 | 2,921                 | 1,642,667                               |

15. LOCAL GOVERNMENT COUNCILS INCLUDING THOSE WITH MULTI-RACIAL ELECTORATES BY DISTRICTS  
AT 30 JUNE 1968 TO 1972

| District                   | 30 June 1968 | 30 June 1969 | 30 June 1970 | 30 June 1971 | 30 June 1972 |
|----------------------------|--------------|--------------|--------------|--------------|--------------|
| <i>Papua—</i>              |              |              |              |              |              |
| Central .. .. .            | 9 (4)        | 9 (4)        | 9 (4)        | 9 (6)        | 11 (8)       |
| Gulf .. .. .               | 7 (3)        | 7 (3)        | 7 (4)        | 7 (4)        | 7 (4)        |
| Milne Bay .. .. .          | 14 (5)       | 14 (8)       | 14 (9)       | 14 (9)       | 14 (9)       |
| Northern .. .. .           | 6 (6)        | 6 (6)        | 6 (6)        | 6 (6)        | 7 (6)        |
| Southern Highlands .. .. . | 11 (11)      | 11 (11)      | 11 (11)      | 13 (13)      | 13 (13)      |
| Western .. .. .            | 5 (4)        | 5 (4)        | 6 (6)        | 6 (6)        | 8 (8)        |
| <i>New Guinea—</i>         |              |              |              |              |              |
| Bougainville .. .. .       | 7 (6)        | 7 (6)        | 7 (6)        | 8 (7)        | 8 (7)        |
| Eastern Highlands .. .. .  | 8 (8)        | 8 (8)        | 7 (7)        | 7 (7)        | 7 (7)        |
| Chimbu .. .. .             | 6 (6)        | 6 (6)        | 7 (7)        | 7 (7)        | 7 (7)        |
| Western Highlands .. .. .  | 11 (6)       | 11 (8)       | 12 (9)       | 12 (10)      | 13 (11)      |
| East New Britain .. .. .   | 3 (2)        | 3 (3)        | 3 (3)        | 5 (4)        | 5 (4)        |
| West New Britain .. .. .   | 6 (6)        | 6 (6)        | 6 (6)        | 6 (6)        | 6 (6)        |
| New Ireland .. .. .        | 5 (3)        | 5 (4)        | 5 (4)        | 5 (4)        | 5 (4)        |
| Manus .. .. .              | 1 (1)        | 1 (1)        | 1 (1)        | 1 (1)        | 1 (1)        |
| Madang .. .. .             | 11 (7)       | 11 (10)      | 13 (13)      | 14 (14)      | 14 (14)      |
| Morobe .. .. .             | 13 (6)       | 13 (9)       | 13 (10)      | 14 (13)      | 14 (13)      |
| East Sepik .. .. .         | 10 (10)      | 10 (10)      | 10 (10)      | 10 (10)      | 10 (10)      |
| West Sepik .. .. .         | 9 (5)        | 9 (5)        | 9 (6)        | 9 (6)        | 9 (6)        |
| Total .. .. .              | 142 (99)     | 142 (112)    | 146 (122)    | 153 (133)    | 159 (138)    |

Note: The numbers in brackets are those councils with multi-racial electorates.

APPENDIX II—continued

16. EXECUTIVE AND ADVISORY ORGANISATIONS: BASIS OF ESTABLISHMENT, FUNCTIONS AND COMPOSITION AT 30 JUNE 1972

| Name  | Statutory or other basis of establishment | Functions   | Composition  |
|---|---|---|--|
| Administration Supply and Tenders Board           | <i>Treasury Ordinance 1951-1965</i>       | To control purchases, supply and disposal of stores, and letting of contracts for works and services  | Three first division officers of the Public Service appointed by the Administrator   |
| Apprenticeship Board                              | <i>Apprenticeship Ordinance 1967</i>      | To exercise a general supervision over the theoretical and practical training of apprentices  | Secretary, Department of Labour or his nominee, Director of Education or his nominee, two persons representing employers, two persons representing employees, three other persons, all members being appointed by the Administrator  |
| Censorship Advisory Panel                         | <i>Customs Ordinance 1951-59</i>          | To advise on suitability of films imported for exhibition in Papua New Guinea   | Chairman and six members appointed by the Administrator  |
| Child Welfare Council                             | <i>Child Welfare Ordinance 1961-1966</i>  | To advise on matters relating to child welfare and make recommendations in respect of individual children   | Director of Child Welfare, a Welfare Officer, two mission representatives, a legal officer of the Public Service, a representative of the Police Force not below the rank of Inspector, a representative of the Department of Education and five other persons of whom at least two are women and none is a person already specified. All the above are appointed by the Minister for the Interior |
| Companies Auditors Board                          | <i>Companies Ordinance 1963-1967</i>      | To report to the Administrator on matters relating to the auditing of Companies and to control the registration of company auditors and liquidators | <i>Chairman:</i> A legal practitioner of not less than five years' standing<br><i>Members:</i> A member of the Institute of Chartered Accountants and a member of the Australian Society of Accountants, both being resident in Papua New Guinea. All three are appointed by the Administrator   |
| District Boundaries Committee                     | Administrative direction                  | To maintain a continuing review of the need for variations in existing District boundaries and for the establishment of additional Districts        | <i>Chairman:</i> Director of District Administration<br><i>Members:</i> Representatives of the Department of the Administrator, the Public Service Commissioner, Department of Lands, Surveys and Mines.   |
| District Co-ordinating Committees (All Districts) | Administrative direction                  | Co-ordination of Administration programmes in the District  | <i>Chairman:</i> District Commissioner<br><i>Members:</i> Deputy District Commissioner. Senior officers in the District representing the Departments of Health, Agriculture, Stock and Fisheries, Education and Forestry   |

16. EXECUTIVE AND ADVISORY ORGANISATIONS: BASIS OF ESTABLISHMENT, FUNCTIONS AND COMPOSITION  
AT 30 JUNE 1972—continued

| Name  | Statutory or other basis of establishment              | Functions   | Composition   |
|---|--|---|---|
| District Education Boards                   | <i>Education (Papua and New Guinea) Ordinance 1970</i> | To plan and oversight educational development at district level   | District Superintendent (Chairman); two Local Government Council representatives; three Administration representatives; three church agency representatives; two teachers' representatives; two community representatives (all appointed by the Minister for Education)                           |
| Electoral Boundaries Distribution Committee | <i>Electoral Ordinance 1963-1971</i>                   | To advise House of Assembly on national electorates   | <i>Chairman:</i> Chief Electoral Officer<br><i>Members:</i> Commissioner for Local Government and Surveyor General official members; New Guinean representative and Papuan representative private members   |
| Ex-Servicemen's Credit Board                | <i>Ex-Servicemen's Credit Ordinance 1958-1969</i>      | To determine and supervise loans to eligible ex-servicemen  | Three officers of the Departments of the Treasury, Lands, Surveys and Mines, and Agriculture, Stock and Fisheries who are appointed by the Minister for External Territories  |
| Interdepartmental Co-ordinating Committee   | Administrative direction                               | To advise the Administrator on co-ordination of policy  | Administrator, Deputy Administrator, all heads of Departments, representative of the office of Programming and Co-ordination, and the Director of Transport   |
| Land Boards                                 | <i>Land Ordinance 1962-1967</i>                        | To consider applications for the lease of land and associated dealings<br>(There may be several Boards sitting at the same time)                    | Chairman, Deputy Chairman and one other member all appointed by the Administrator. The Administrator may appoint other persons to act as members in relation to certain localities for a specified period   |
| Land Development Board                      | Administrative direction                               | To advise on land development and settlement and on land use patterns   | <i>Chairman:</i> Assistant Administrator<br><i>Members:</i> Director of Lands, Surveys and Mines, Director of District Administration, Director of Agriculture, Stock and Fisheries, Director of Forests, Director of Public Works, representative of the Office of Programming and Co-ordination |
| Medical Board                               | <i>Medical Services Ordinance 1965-1971</i>            | To administer the Medical Services Ordinance which provides for the registration of medical and dental practitioners and regulates medical practice | <i>Chairman:</i> Director of Public Health<br><i>Members:</i> Secretary, Department of Law, three medical practitioners, one dental practitioner, one other person with university qualifications in fields other than medicine, surgery or dentistry, appointed by the Administrator             |

APPENDIX II—continued

16. EXECUTIVE AND ADVISORY ORGANISATIONS: BASIS OF ESTABLISHMENT, FUNCTIONS AND COMPOSITION  
AT 30 JUNE 1972—continued

| Name  | Statutory or other basis of establishment                                    | Functions   | Composition   |
|---|--|---|---|
| Mining Advisory Board                                   | <i>Mining Ordinance 1928-1967</i>  | To advise on mining operations  | A Chairman, Deputy Chairman and two other members, all being appointed by the Administrator   |
| National Parks and Gardens Board                        | <i>National Parks and Gardens Ordinance 1966-1971</i>                        | To control, manage and develop land reserved as national parks, gardens, nature reserves and historic sites | Chairman, Deputy Chairman and three other members, appointed by the Administrator   |
| National Education Board                                | <i>Education (Papua and New Guinea) Ordinance (1970)</i>                     | To plan and oversight the development of education at national level  | Director of Education (Chairman); three Administration representatives; three church agency representatives; two Local Government Council representatives; two teachers' representatives; two community representatives; one tertiary education representative; (all appointed by the Minister for Education)   |
| National Fitness Council                                | <i>National Fitness Ordinance (1966)</i>                                     | To advise the Administrator on requirements for developing public awareness of need for physical fitness    | Five members appointed by the Administrator   |
| Native Loans Board                                      | <i>Native Loans Fund Ordinance 1955-1966</i>                                 | To grant loans of moneys or goods to indigenous individuals or groups for economic or welfare purposes      | Four members, including an indigenous person, appointed by the Administrator  |
| Nursing Council   | <i>Medical Services Ordinance 1965-1967</i>                                  | To regulate the nursing profession  | Four officers of the Department of Public Health who are registered or eligible for registration, a solicitor from the Department of Law, two medical practitioners, one of whom shall be actively connected with nursing education, two persons employed by or who are members of a Christian mission in Papua New Guinea, who are registered as nurses, and two nurses appointed or elected as representing the interests of nurses in Papua New Guinea |
| Papua and New Guinea Coffee Marketing Board             | <i>Papua and New Guinea Coffee Marketing Board Ordinance 1963-1971</i>       | To regulate the marketing of coffee from Papua New Guinea   | Six members, of whom five are representatives of the coffee growers in Papua New Guinea and one is a public servant, all being appointed by the Minister  |
| Papua and New Guinea Copra Industry Stabilisation Board | <i>Papua and New Guinea Copra Industry Stabilisation Ordinance 1954-1968</i> | To determine the Copra Fund Bounty  | Two representatives of the copra producers of New Guinea, one representative of the copra producers of Papua and two other members, all being appointed by the Minister for External Territories  |

16. EXECUTIVE AND ADVISORY ORGANISATIONS: BASIS OF ESTABLISHMENT, FUNCTIONS AND COMPOSITION  
AT 30 JUNE 1972—continued

| Name  | Statutory or other basis of establishment                              | Functions  | Composition   |
|---|--|--|---|
| Papua and New Guinea Copra Marketing Board  | <i>Papua and New Guinea Copra Marketing Board Ordinance 1952-1967</i>  | To market copra  | Chairman and five members—two representatives of the copra producers of New Guinea, one representative of the copra producers of Papua, the Director of Agriculture, Stock and Fisheries and one other member, all being appointed by the Minister for External Territories   |
| Papua and New Guinea Electricity Commission | <i>Papua and New Guinea Electricity Commission Ordinance 1961-1971</i> | To plan and co-ordinate the supply of electricity; to generate, transmit, distribute and sell electricity; and to determine and control standards for electrical contractors, appliances, fittings and wiring                                      | A Commissioner and four Associate Commissioners appointed by the Minister for External Territories on the recommendation of the Administrator   |
| Papua and New Guinea Harbours Board         | <i>Papua and New Guinea Harbours Board Ordinance 1963-1971</i>         | Regulation, management, operation and control of declared ports, the movement of shipping therein, and the provision and maintenance of wharves, docks, piers, jetties, machinery, equipment and office installations used in connection therewith | Chairman and four members appointed by the Minister on the recommendation of the Administrator  |
| Papua New Guinea Tourist Board              | <i>Papua and New Guinea Tourist Board Ordinance 1966</i>               | To provide for the development, control and management of and assistance to, Tourism and Tourist facilities  | Chairman and eleven Board Members appointed by the Administrator, an officer of the Public Service and an Executive Director appointed by the Board   |
| Petroleum Advisory Board                    | <i>Petroleum (Prospecting and Mining) Ordinance 1951-1967</i>          | To advise on all petroleum prospecting and mining operations   | Chairman, five members, all appointed by the Administrator  |
| Place Names Committee                       | <i>Papua and New Guinea Place Names Ordinance 1965</i>                 | To provide for the naming of places  | (Chairman is in the Department of Lands, Surveys and Mines)   |
| Political Education Committee               |  |  | (Chairman is in the Department of the Administrator)  |
| Reviewing Committee                         | <i>Corrective Institutions Ordinance 1957-1969</i>                     | To advise the Administrator on the review of detainees serving life sentences  | Three members appointed by the Administrator (the Secretary for Law, Secretary Department of the Administrator and the Director of Child Welfare)   |
| Road Safety Council                         | Administrative direction   | To conduct a continuous programme of public education aimed at promoting road safety; to encourage a better understanding and observance of traffic laws and to advise on specific road safety matters referred to it                              | <i>Chairman:</i> Director of District Administration; and Directors of Information and Extension Services, Public Works, Public Health, Commonwealth Department of Works (Regional Director), Secretary for Labour, Commissioner of Police or their delegates; representative of Automobile Association of Papua New Guinea; Presidents of Regional Branches of Road Safety Council; representatives of Service organisations |

APPENDIX II—continued

16. EXECUTIVE AND ADVISORY ORGANISATIONS: BASIS OF ESTABLISHMENT, FUNCTIONS AND COMPOSITION  
AT 30 JUNE 1972—continued

| Name                                     | Statutory or other basis of establishment  | Functions  | Composition  |
|--|--|--|--|
| Rubber Board                             | <i>Rubber Ordinance 1953</i>   | To consider appeals against the classification of rubber for export  | Three representatives of the rubber producers and two officers of the Public Service, all being appointed by the Administrator   |
| Secondary Industry Development Committee | Administrative Direction   | To advise on Government Policy on industrial development   | <i>Chairman:</i> the Director of Trade and Industry<br><i>Members:</i> Representatives of several Departments with interest in Industrial Development matters  |
| Stamp Advisory Committee                 | Administrative direction   | To advise on designs for Papua New Guinea postage stamps   | <i>Chairman:</i> Assistant Director (Operations and Administration), Department of Posts and Telegraphs<br><i>Members:</i> One official member, and five non-official members  |
| Tariff Advisory Committee                | <i>Tariff Advisory Committee Ordinance 1969-1971</i>   | To advise on matters relating to established and prospective industries  | <i>Chairman,</i> Deputy Chairman and two members appointed by the Minister for External Territories  |
| Teaching Service Commission              | <i>Teaching Service Ordinance 1971</i>   | To determine and safeguard the terms and conditions of service of members of the teaching service              | A Commissioner and one or more Associate Commissioners appointed by the Minister for External Territories  |
| Town Planning Board                      | <i>Town Planning Ordinance 1952-1959</i>   | Town development, planning and design  | <i>Chairman,</i> Deputy Chairman and three other members, appointed by the Administrator   |
| Transport Control Board                  | Motor Omnibus Regulations (No. 23 of 1962) made under the <i>Motor Traffic Ordinance 1950-1968</i> | To allocate licences for motor omnibuses and to define the standard and scale of their operations              | <i>Chairman:</i> Secretary for Law<br><i>Deputy Chairman:</i> Secretary, Department of the Administrator<br><i>Members:</i> One member appointed by the Administrator with an alternative member to act in the absence of this member  |
| Water Resources Advisory Board           | <i>Water Resources Ordinance 1962-1970</i>   | Advise the Administrator on the control of Papua New Guinea's water resources                                  | <i>Chairman:</i> Director of Water Resources<br><i>Members:</i> One from each of the Division of District Administration, the Departments of Lands, Surveys and Mines, Agriculture, Stock and Fisheries and Forests, and an officer of the Papua and New Guinea Electricity Commission |
| Water Transport Committee                | Administrative direction   | To make recommendations to the Administrator on the size and distribution of the Administration shipping fleet | <i>Chairman:</i> Director of District Administration or his nominee<br><i>Members:</i> Superintendent of Marine; Officer of the Department of the Administrator  |



## APPENDIX III

### JUSTICE

#### 1. SUPREME COURT CASES HEARD DURING YEAR ENDED 30 JUNE 1972

##### A. In its Criminal Jurisdiction

| Offence   | Charged    | Convicted  | Discharged | Nolle<br>Prosequi | Sentence                                  |
|---|------------|------------|------------|-------------------|---|
| <b>1. Offences against the person—</b>                |            |            |            |                   |   |
| Murder, wilful .. .. .                                | 199        | 154        | 40         | 5                 | Rising of Court to 14 years IHL           |
| Murder .. .. .  | 20         | 15         | 4          | 1                 | \$50 recognizance to 8 years IHL          |
| Unlawful killing or attempt .. .. .                   | 66         | 27         | 37         | 2                 | Rising of Court to 4 years IHL            |
| Unlawful wounding .. .. .                             | 55         | 29         | 23         | 3                 | \$20 recognizance to 2 years IHL          |
| Grievous bodily harm .. .. .                          | 33         | 13         | 20         | ..                | \$10 recognizance to 5 years IHL          |
| Rape or attempt .. .. .                               | 44         | 32         | 12         | ..                |   |
| Unlawful assault .. .. .                              | 16         | 13         | 3          | ..                |   |
| Other offences against females .. .. .                | 34         | 24         | 7          | 3                 | Rising of Court to 2 years 9 months IHL   |
| Incest .. .. .  | 13         | 13         | ..         | ..                | 10 months IHL to 4 years IHL              |
| Unnatural and indecent offences .. .. .               | 22         | 12         | 7          | 3                 | \$10 recognizance to 2 years 3 months IHL |
| Other offences against the person .. .. .             | 29         | 11         | 9          | 9                 | Rising of Court to 12 months IHL          |
| Total .. .. .   | 531        | 343        | 159        | 26                |   |
| <b>2. Offences against property—</b>                  |            |            |            |                   |   |
| Breaking and entering .. .. .                         | 84         | 65         | 16         | 3                 | \$20 recognizance to 18 months IHL        |
| Housebreaking .. .. .                                 | 81         | 61         | 14         | 6                 | \$10 recognizance to 3 years 4 months IHL |
| Stealing .. .. .                                      | 113        | 93         | 15         | 5                 | \$10 recognizance to 4 years IHL          |
| Receiving .. .. .                                     | 10         | 7          | 3          | ..                | \$20 recognizance to 1 year 9 months IHL  |
| Other offences against property .. .. .               | 6          | 4          | 2          | ..                | 4 months IHL to 6 months IHL              |
| Total .. .. .   | 294        | 230        | 50         | 14                |   |
| <b>3. Offences against currency—</b>                  |            |            |            |                   |   |
| Forgery .. .. .                                       | 23         | 21         | 2          | ..                | \$10 recognizance to 16 months IHL        |
| Uttering .. .. .                                      | 1          | 1          | ..         | ..                | 6 months IHL                              |
| Total .. .. .   | 24         | 22         | 2          | ..                |   |
| <b>4. Offences not included in preceding classes—</b> |            |            |            |                   |   |
| Relating to escapes .. .. .                           | 3          | 3          | ..         | ..                | Rising of Court to 6 months IHL           |
| Relating to Posts and Telegraphs .. .. .              | 16         | 9          | 7          | ..                | \$50 recognizance to 10 months IHL        |
| Arson .. .. .   | 6          | 3          | 3          | ..                | 4 months IHL to 9 months IHL              |
| Conspiracy .. .. .                                    | 10         | 4          | 5          | 1                 | Rising of Court to 18 months IHL          |
| Unlawful assemblies .. .. .                           | 5          | 2          | 3          | ..                | 12 months IHL to 18 months IHL            |
| Total .. .. .   | 40         | 21         | 18         | 1                 |   |
| <b>GRAND TOTAL .. .. .</b>                            | <b>888</b> | <b>616</b> | <b>231</b> | <b>41</b>         |   |
| <b>Comprising—</b>                                    |            |            |            |                   |   |
| Europeans .. .. .                                     | 48         | 35         | 12         | 1                 |   |
| Asians .. .. .  | ..         | ..         | ..         | ..                |   |
| Indigenes .. .. .                                     | 840        | 581        | 219        | 40                |   |
| <b>GRAND TOTAL .. .. .</b>                            | <b>888</b> | <b>616</b> | <b>231</b> | <b>41</b>         |   |

Note: IHL—Imprisonment with hard labour.

APPENDIX III—continued

|   |    |    |       |
|---|----|----|-------|
| <i>B. In Its Appellate Jurisdiction:</i>          |    |    |       |
| Appeals from inferior Courts—Filed                | .. | .. | 160   |
| Upheld  | .. | .. | 48    |
| Quashed   | .. | .. | 7     |
| Appeals from Supreme Court to Full Court Filed    | .. | .. | 23    |
| Upheld  | .. | .. | 5     |
| <i>C. In Its Probate Jurisdiction:</i>            |    |    |       |
| Probate   | .. | .. | 18    |
| Reseal  | .. | .. | 9     |
| Order to Administer                               | .. | .. | 22    |
| Order to Administer (c.t.a.)                      | .. | .. | 5     |
| Letters of Administration                         | .. | .. | 1     |
| Letters of Administration (c.t.a.)                | .. | .. | ..    |
| Elections and Undertakings to Administer          | .. | .. | ..    |
| <i>D. In Its Civil Jurisdiction:</i>              |    |    |       |
| Writs of Summons Issued                           | .. | .. | 659   |
| Motions and Petitions Heard                       | .. | .. | 90    |
| <i>E. In Its Matrimonial Causes Jurisdiction:</i> |    |    |       |
| Petitions for Dissolution of Marriage             | .. | .. | 71    |
| <i>F. In Other Jurisdiction:</i>                  |    |    |       |
| Bills of Sale                                     | .. | .. | 2,356 |

2. LOCAL COURT CASES HEARD DURING YEAR ENDED 30 JUNE 1972

*Papua*

|                                |    |    |        |
|--------------------------------|----|----|--------|
| Offences against—              |    |    |        |
| The person                     | .. | .. | 1,639  |
| Property                       | .. | .. | 2,256  |
| Public Order                   | .. | .. | 6,015  |
| Local Government Council rules | .. | .. | 3,343  |
| Motor traffic laws             | .. | .. | 1,539  |
| Other offences                 | .. | .. | 1,311  |
| Total convictions..            | .. | .. | 16,103 |
| Total acquittals               | .. | .. | 3,344  |
| Total cases heard              | .. | .. | 19,447 |

*New Guinea*

|                                |    |    |        |
|--------------------------------|----|----|--------|
| Offences against—              |    |    |        |
| The person                     | .. | .. | 3,888  |
| Property                       | .. | .. | 6,365  |
| Public Order                   | .. | .. | 16,032 |
| Local Government Council rules | .. | .. | 6,775  |
| Motor traffic laws             | .. | .. | 2,404  |
| Other offences                 | .. | .. | 2,543  |
| Total convictions..            | .. | .. | 38,007 |
| Total acquittals               | .. | .. | 4,485  |
| Total cases heard              | .. | .. | 42,492 |

APPENDIX III—*continued*

3. DISTRICT COURT CASES HEARD DURING YEAR ENDED 30 JUNE 1972

*Papua*

|                                |    |    |    |    |        |
|--------------------------------|----|----|----|----|--------|
| Offences against—              |    |    |    |    |        |
| The person                     | .. | .. | .. | .. | 1,091  |
| Property                       | .. | .. | .. | .. | 1,437  |
| Public Order                   | .. | .. | .. | .. | 2,630  |
| Local Government Council rules | .. | .. | .. | .. | 747    |
| Motor traffic laws             | .. | .. | .. | .. | 2,851  |
| Other offences                 | .. | .. | .. | .. | 865    |
| Total convictions              |    |    |    |    | 9,621  |
| Total acquittals               |    |    |    |    | 1,205  |
| Total cases heard              |    |    |    |    | 10,826 |

*New Guinea*

|                                |    |    |    |    |        |
|--------------------------------|----|----|----|----|--------|
| Offences against—              |    |    |    |    |        |
| The person                     | .. | .. | .. | .. | 1,981  |
| Property                       | .. | .. | .. | .. | 2,648  |
| Public Order                   | .. | .. | .. | .. | 6,013  |
| Local Government Council rules | .. | .. | .. | .. | 1,301  |
| Motor traffic laws             | .. | .. | .. | .. | 1,818  |
| Other offences                 | .. | .. | .. | .. | 985    |
| Total convictions              |    |    |    |    | 14,746 |
| Total acquittals               |    |    |    |    | 993    |
| Total cases heard              |    |    |    |    | 15,739 |

# APPENDIX IV

## PUBLIC FINANCE

### 1. REVENUE AND EXPENDITURE BY SOURCE FOR YEARS ENDED 30 JUNE 1968 TO 1972

| Source  | 1968               | 1969               | 1970               | 1971               | 1972               |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|
|   | \$                 | \$                 | \$                 | \$                 | \$                 |
| Internal Revenue(a) .. .. .   | 47,766,376         | 55,136,914         | 72,442,220         | 83,365,734         | 95,253,381         |
| Grant by Commonwealth Government of Australia(b) .. .. .            | 77,594,252         | 87,271,286         | 97,270,921         | 69,999,682         | 69,874,990         |
| Papua New Guinea Loans .. .. .                                      | 8,397,214          | 7,182,956          | 15,636,280         | 15,587,411         | 25,540,440         |
| International Loans .. .. .   | ..                 | 51,266             | 2,620,359          | 2,620,359          | 8,130,734          |
| Special Commonwealth Advance—Deficit Finance .. .. .                | ..                 | ..                 | 2,999,807          | ..                 | ..                 |
| Special Loan—Purchase of Equity—Bougainville Copper Pty Ltd .. .. . | ..                 | ..                 | 12,500,000         | 12,500,000         | ..                 |
| Commonwealth Development Loan—Arawa .. .. .                         | ..                 | ..                 | 2,000,000          | 6,300,000          | 11,700,000         |
| <b>Total Revenue(a) .. .. .</b>                                     | <b>133,757,842</b> | <b>149,642,422</b> | <b>204,233,042</b> | <b>190,373,186</b> | <b>210,499,545</b> |
| <b>Total Expenditure(c) .. .. .</b>                                 | <b>133,546,995</b> | <b>149,485,395</b> | <b>204,277,522</b> | <b>190,859,960</b> | <b>209,744,794</b> |
| Unexpended Balance—Commonwealth Development Loan—Arawa .. .. .      | ..                 | ..                 | 300,000            | ..                 | ..                 |
| <b>Excess of Revenue over Expenditure .. .. .</b>                   | <b>210,847</b>     | <b>157,027</b>     | <b>344,480</b>     | <b>486,774</b>     | <b>754,751</b>     |

(a) For 1968, 1969, 1970 and 1971 refunds of revenue have been deducted from total internal revenue. (b) The 1970-71 Commonwealth Grant is not comparable with previous financial years because costs of certain allowances and entitlements in respect of overseas officers previously included in the Commonwealth Grant are now borne directly by the Commonwealth of Australia. (c) Reduced by taxation refunds and refunds of revenue for 1968, 1969, 1970 and 1971.

### 2. REVENUE BY SOURCE FOR YEARS ENDED 30 JUNE 1968 TO 1972

| Source  | 1968               | 1969               | 1970               | 1971               | 1972               |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|
|   | \$                 | \$                 | \$                 | \$                 | \$                 |
| Customs .. .. .   | 16,555,309         | 17,668,973         | 23,951,145         | 30,960,679         | 33,135,551         |
| Licences .. .. .  | 738,392            | 814,430            | 907,105            | 1,038,026          | 1,440,021          |
| Stamp duties .. .. .  | 507,728            | 553,011            | 870,262            | 682,733            | 963,603            |
| Postal .. .. .  | 3,543,374          | 4,682,037          | 5,287,031          | ..                 | ..                 |
| Land revenue .. .. .  | 748,113            | 832,010            | 1,102,096          | 1,098,481          | 1,200,057          |
| Mining receipts .. .. .   | 46,840             | 71,756             | 116,070            | 240,670            | 152,904            |
| Fees and fines .. .. .  | 282,857            | 364,190            | 459,216            | 566,651            | 647,562            |
| Health revenue .. .. .  | 316,850            | 352,015            | 464,041            | 675,498            | 724,695            |
| Forestry .. .. .  | 639,980            | 547,212            | 684,181            | 923,018            | 938,224            |
| Agriculture .. .. .   | 1,086,547          | 1,014,555          | 1,010,466          | 1,020,915          | 1,053,375          |
| Public utilities .. .. .  | 904,719            | 1,172,931          | 1,273,087          | 1,653,678          | 1,791,198          |
| Direct taxation .. .. .   | 15,904,205         | 15,922,976         | 21,075,062         | 29,374,594         | 36,116,691         |
| Miscellaneous .. .. .   | 4,858,656          | 4,613,641          | 5,380,360          | 5,652,715          | 6,707,630          |
| Recoverable services .. .. .  | 3,766,666          | 5,263,607          | 9,862,097          | 9,478,075          | 10,381,870         |
| <b>Total internal revenue(b) .. .. .</b>                            | <b>49,900,236</b>  | <b>55,136,914</b>  | <b>43,397,220</b>  | <b>83,365,734</b>  | <b>95,253,381</b>  |
| Papua New Guinea loans .. .. .                                      | 8,397,214          | 7,182,956          | 15,636,280         | 15,587,411         | 25,540,440         |
| Grant by Commonwealth Government of Australia(a) .. .. .            | 77,594,252         | 87,271,286         | 97,270,921         | 69,999,682         | 69,874,990         |
| International loans .. .. .   | ..                 | 51,266             | 1,383,814          | 2,620,359          | 8,130,734          |
| Special Commonwealth Advance—(Deficit finance) .. .. .              | ..                 | ..                 | 2,999,807          | ..                 | ..                 |
| Commonwealth Development Loan—Arawa .. .. .                         | ..                 | ..                 | 2,000,000          | 6,300,000          | 11,700,000         |
| Special Loan—Purchase of Equity—Bougainville Copper Pty Ltd .. .. . | ..                 | ..                 | 12,500,000         | 12,500,000         | ..                 |
| <b>Total receipts .. .. .</b>                                       | <b>133,891,702</b> | <b>149,642,422</b> | <b>204,233,042</b> | <b>190,373,186</b> | <b>210,499,545</b> |

(a) The 1970-71 Commonwealth Grant is not comparable with previous financial years because costs of certain allowances and entitlements in respect of overseas officers previously included in the Commonwealth Grant are now directly borne by the Commonwealth of Australia. (b) For 1968 refunds of revenue amounted to \$713,776, which when deducted makes Internal Revenue \$22,804,644 and Total receipts \$48,753,911. From 1969 onwards refunds have been deducted from the relevant revenue items.

## 3. EXPENDITURE BY CATEGORY FOR YEARS ENDED 30 JUNE 1968 TO 1972

| Particulars                                  | 1968        | 1969        | 1970        | 1971        | 1972        |
|--|-------------|-------------|-------------|-------------|-------------|
|  | \$          | \$          | \$          | \$          | \$          |
| Special Appropriation .. .. .                | 2,784,924   | 5,733,767   | 14,466,764  | 13,294,845  | 13,943,408  |
| Administrator .. .. .                        | 1,329,203   | 7,750,972   | 9,277,985   | 6,491,361   | 6,811,897   |
| Programming and Co-ordination <sup>(a)</sup> | .. .. .     | .. .. .     | .. .. .     | .. .. .     | 1,243,974   |
| House of Assembly .. .. .                    | 420,277     | 291,137     | 383,370     | 408,947     | 376,751     |
| Information and Extension Services           | 1,001,298   | 1,187,303   | 1,238,932   | 11,171,356  | 1,599,941   |
| Public Service Board .. .. .                 | 840,266     | 1,096,184   | 1,337,538   | 785,242     | 923,581     |
| Administrative College .. .. .               | 429,718     | 454,003     | 499,985     | 369,426     | 443,141     |
| Treasury .. .. .                             | 4,118,609   | 3,244,847   | 2,076,087   | 4,668,655   | 3,647,243   |
| Taxation .. .. .                             | 274,305     | 332,121     | 397,744     | 259,228     | 300,710     |
| Stores and Supply .. .. .                    | 8,657,750   | 8,162,575   | 9,967,202   | 8,484,122   | 8,897,923   |
| Public Health .. .. .                        | 11,124,235  | 12,217,179  | 14,255,250  | 13,231,193  | 14,490,574  |
| Social Development and Home Affairs          | .. .. .     | 1,558,372   | 2,208,441   | 2,181,463   | 3,596,744   |
| District Administration .. .. .              | 6,011,919   | .. .. .     | .. .. .     | .. .. .     | .. .. .     |
| Labour .. .. .                               | 632,190     | 777,800     | 957,375     | 740,979     | 880,228     |
| Education .. .. .                            | 15,062,092  | 17,214,231  | 21,203,811  | 17,938,728  | 20,757,691  |
| Agriculture, Stock and Fisheries ..          | 6,427,111   | 7,491,989   | 8,750,512   | 7,208,485   | 7,983,302   |
| Royal Papua New Guinea Con-                  | .. .. .     | .. .. .     | .. .. .     | .. .. .     | .. .. .     |
| stabulary .. .. .                            | 6,143,423   | 6,670,998   | 7,964,539   | 7,689,082   | 7,908,328   |
| Law .. .. .                                  | 893,080     | 1,112,195   | 1,431,968   | 1,058,431   | 1,511,463   |
| Supreme Court .. .. .                        | 184,412     | 187,722     | 260,633     | 283,635     | 327,156     |
| Land Titles Commission .. .. .               | 298,615     | 294,122     | 254,520     | 164,651     | 182,706     |
| Liquor Commission .. .. .                    | 23,827      | 27,293      | 27,697      | 20,559      | 31,616      |
| Corrective Institutions .. .. .              | 1,144,788   | 1,208,423   | 2,033,933   | 2,177,393   | 2,503,115   |
| Lands, Surveys and Mines .. .. .             | 3,177,012   | 3,269,618   | 5,320,687   | 4,779,958   | 4,397,645   |
| Forests .. .. .                              | 2,369,389   | 2,469,003   | 2,676,932   | 2,081,771   | 2,366,812   |
| Posts and Telegraphs .. .. .                 | 4,750,167   | 5,687,915   | 7,661,389   | 6,774,070   | 6,518,699   |
| Trade and Industry .. .. .                   | 708,564     | 803,558     | 1,051,286   | 456,483     | 244,577     |
| Customs and Migration .. .. .                | 519,792     | 594,172     | 729,422     | 360,774     | 402,008     |
| Transport .. .. .                            | .. .. .     | .. .. .     | 1,293,457   | 1,274,232   | 1,582,729   |
| Investments .. .. .                          | .. .. .     | .. .. .     | 12,500,000  | 12,500,000  | .. .. .     |
| Marine .. .. .                               | 1,378,459   | 1,427,871   | 1,452,504   | 1,279,726   | 1,401,699   |
| Business Development .. .. .                 | .. .. .     | .. .. .     | 10,169      | 377,105     | 565,331     |
| Public Works .. .. .                         | 5,740,364   | 7,116,920   | 8,105,405   | 5,563,565   | 5,676,913   |
| General Overheads .. .. .                    | 2,290,700   | 2,241,080   | 2,744,977   | 2,539,886   | 2,817,013   |
| Maintenance .. .. .                          | 10,580,575  | 12,216,688  | 14,045,715  | 15,697,711  | 17,039,892  |
| Capital Works .. .. .                        | 22,502,713  | 21,379,132  | 28,214,844  | 29,675,309  | 40,000,503  |
| Other Institutions .. .. .                   | 8,622,904   | 11,590,958  | 15,474,640  | 15,022,325  | 23,046,151  |
| Motor Transport .. .. .                      | 2,791,835   | 3,212,971   | 3,555,259   | 3,481,909   | 3,659,316   |
| Government Printer .. .. .                   | 312,479     | 361,276     | 446,550     | 417,356     | 537,838     |
| Total expenditure .. .. .                    | 133,546,995 | 149,485,395 | 204,277,522 | 190,859,960 | 209,744,794 |

(a) New office within the Department of the Administrator.

(b) Includes new office of the Public Solicitor \$346,724.

## 4. EXPENDITURES ON GENERAL MAINTENANCE AND CAPITAL WORKS AND SERVICES FOR YEARS ENDED 30 JUNE 1970 TO 1972

| Services                          | 1970   | 1971   | 1972   |
|-----------------------------------|--------|--------|--------|
|                                   | \$000  | \$000  | \$000  |
| General Maintenance—              |        |        |        |
| General maintenance .. .. .       | 11,557 | 12,930 | 14,195 |
| Maintenance of services .. .. .   | 1,060  | 1,182  | 1,125  |
| Electrical undertakings .. .. .   | 1,428  | 1,585  | 1,719  |
| Total .. .. .                     | 14,045 | 15,697 | 17,040 |
| Capital Works and Services—       |        |        |        |
| Building construction .. .. .     | 12,697 | 13,222 | 12,830 |
| Engineering works and services .. | 14,767 | 15,134 | 25,874 |
| Electrical undertakings .. .. .   | 750    | 1,319  | 1,296  |
| Total .. .. .                     | 28,214 | 29,675 | 40,000 |

APPENDIX IV—continued

5. PAPUA NEW GUINEA LOAN FUND: RECEIPTS AND EXPENDITURES FOR YEARS ENDED 30 JUNE 1970 TO 1972

|   | 1970          | 1971          | 1972          |
|---|---------------|---------------|---------------|
|   | \$            | \$            | \$            |
| <i>Receipts</i>   |               |               |               |
| Balance brought forward .. .. .                                       | ..            | 300,000.00    | 16,240.64     |
| Papua New Guinea Loans—   |               |               |               |
| Loans (Works, Services and Government Instrumentalities)              |               |               |               |
| Ordinance.. .. .  | 6,743,800.00  | 12,041,780.00 | 25,540,440.00 |
| Loans Securities Ordinance—   |               |               |               |
| Redemption .. .. .  | 8,900,000.00  | 3,600,000.00  | ..            |
| Commonwealth Development Loan—Arawa .. .. .                           | 2,000,000.00  | 6,300,000.00  | 11,700,000.00 |
| International Loans .. .. .   | 1,383,813.73  | 2,620,358.15  | 8,130,733.55  |
| Special Loan (Purchase of Equity)—Bougainville Copper Pty Ltd .. .. . | 12,500,000.00 | 12,500,000.00 | ..            |
| Total .. .. .   | 31,527,613.73 | 37,362,138.15 | 45,387,384.51 |
| <i>Expenditure</i>  |               |               |               |
| Capital Works and Services .. .. .                                    | 6,736,280.08  | 11,971,200.23 | 19,506,844.19 |
| Redemption—Special Loan .. .. .                                       | 8,900,000.00  | 3,600,000.00  | ..            |
| Loan Raising Expenses .. .. .   | 7,519.92      | 54,369.11     | 49,806.47     |
| Arawa Development .. .. .   | 1,700,000.00  | 6,600,000.00  | 11,700,000.00 |
| International Loans Telecommunications Development .. .. .            | 507,706.49    | 870,046.97    | 2,177,436.33  |
| Roads Development .. .. .   | ..            | 678,444.59    | 4,332,857.08  |
| Agricultural Development .. .. .                                      | 876,107.24    | 1,071,866.87  | 829,561.50    |
| Ramu Hydro-Electric Scheme .. .. .                                    | ..            | ..            | 790,878.94    |
| Purchase of Equity  |               |               |               |
| Bougainville Copper Pty Ltd .. .. .                                   | 12,500,000.00 | 12,500,000.00 | ..            |
| Balance at 30 June (a) .. .. .  | 300,000.00    | 16,210.66     | ..            |
| Other Loans .. .. .   | ..            | ..            | 6,000,000.00* |
| Total .. .. .   | 31,527,613.73 | 37,362,138.15 | 45,387,384.51 |

(a) Represents unexpended balance Commonwealth Development Loan—Arawa. (b) Represents unexpended balance Papua and New Guinea Loan receipts.

\* This is made up of P.N.G. Electricity Commission \$4,000,000.00; Housing Commission \$1,000,000.00; Investment Corporation (Purchase of Equity—Bougainville Copper Pty Ltd) \$1,000,000.00.

# APPENDIX V

## TAXATION

### 1. RATES OF TAX FOR 1971-72 FINANCIAL YEAR

The rates applicable to income derived for the year ended 30 June 1971 are set out in the following tables:

(i) *General Rates of Income Tax on Taxable Income Payable by Persons other than Companies.*

The rate of income tax for each part of the taxable income specified in the first column of the following table is the percentage of that part set out in the second column of that table opposite to the reference to that part of the taxable income in the first column:

| First column<br>Parts of Taxable Income               | Second column<br>Percentage |
|---|-----------------------------|
| The part of the taxable income that—                  |                             |
| does not exceed \$300 .. .. .                         | .4                          |
| exceeds \$300 but does not exceed \$400 .. .. .       | 1.2                         |
| exceeds \$400 but does not exceed \$600 .. .. .       | 2.6                         |
| exceeds \$600 but does not exceed \$1,000 .. .. .     | 5.2                         |
| exceeds \$1,000 but does not exceed \$1,200 .. .. .   | 6.5                         |
| exceeds \$1,200 but does not exceed \$1,600 .. .. .   | 7.8                         |
| exceeds \$1,600 but does not exceed \$2,400 .. .. .   | 10.4                        |
| exceeds \$2,400 but does not exceed \$3,200 .. .. .   | 13.0                        |
| exceeds \$3,200 but does not exceed \$3,800 .. .. .   | 15.4                        |
| exceeds \$3,800 but does not exceed \$4,200 .. .. .   | 18.0                        |
| exceeds \$4,200 but does not exceed \$4,800 .. .. .   | 20.0                        |
| exceeds \$4,800 but does not exceed \$6,000 .. .. .   | 22.5                        |
| exceeds \$6,000 but does not exceed \$8,000 .. .. .   | 26.0                        |
| exceeds \$8,000 but does not exceed \$10,000 .. .. .  | 29.0                        |
| exceeds \$10,000 but does not exceed \$12,000 .. .. . | 31.0                        |
| exceeds \$12,000 but does not exceed \$16,000 .. .. . | 33.0                        |
| exceeds \$16,000 but does not exceed \$22,000 .. .. . | 36.0                        |
| exceeds \$22,000 but does not exceed \$30,000 .. .. . | 38.0                        |
| exceeds \$30,000 .. .. .                              | 40.0                        |

(ii) *Rates of Income Tax on Taxable Income Payable by a Company other than a Company in the Capacity of a Trustee.*

Twenty-two and one-half per centum of the taxable income.

(iii) *Rate of Income Tax in Respect of Chargeable Income.*

The rate of income tax in respect of the chargeable income of a taxpayer is two per centum.

APPENDIX V—continued

2. PARTNERSHIPS AND TRUSTS: NUMBER, NET INCOME, DEPRECIABLE ASSETS, DEPRFCIATION ALLOWED AND TRADING STOCK, CLASSIFIED BY GRADE OF NET INCOME FOR INCOME YEAR 1969-70

| Grade of net income  | Number | Net income | Depreciable assets   |                    |                  | Depreciation allowed | Trading stock on hand |                |
|----------------------|--------|------------|----------------------|--------------------|------------------|----------------------|-----------------------|----------------|
|                      |        |            | At beginning of year | Bought during year | Sold during year |                      | At beginning of year  | At end of year |
|                      |        | \$'000     | \$'000               | \$'000             | \$'000           | \$'000               | \$'000                | \$'000         |
| <b>Partnerships—</b> |        |            |                      |                    |                  |                      |                       |                |
| <b>\$</b>            |        |            |                      |                    |                  |                      |                       |                |
| Loss .. ..           | 126    | -481       | 833                  | 626                | 130              | 192                  | 339                   | 329            |
| Nil Income ..        | 19     | ..         | 163                  | 5                  | 157              | ..                   | 79                    | 3              |
| 1- 1,999 ..          | 297    | 240        | 483                  | 564                | 160              | 101                  | 495                   | 143            |
| 2,000- 3,999 ..      | 140    | 404        | 573                  | 480                | 172              | 90                   | 210                   | 261            |
| 4,000- 5,999 ..      | 108    | 544        | 603                  | 309                | 62               | 92                   | 363                   | 386            |
| 6,000- 7,999 ..      | 76     | 520        | 575                  | 308                | 113              | 78                   | 366                   | 432            |
| 8,000- 9,999 ..      | 54     | 480        | 530                  | 203                | 22               | 71                   | 284                   | 401            |
| 10,000-19,999 ..     | 173    | 2,519      | 1,985                | 1,031              | 421              | 335                  | 1,647                 | 1,651          |
| 20,000-29,999 ..     | 61     | 1,494      | 813                  | 768                | 62               | 163                  | 822                   | 833            |
| 30,000-39,999 ..     | 30     | 1,061      | 525                  | 188                | 10               | 85                   | 565                   | 642            |
| 40,000 and over ..   | 40     | 4,230      | 1,692                | 5,291              | 711              | 2,583                | 726                   | 549            |
| Total—1969-70 ..     | 1,124  | 11,010     | 8,775                | 9,773              | 2,021            | 3,791                | 5,895                 | 5,629          |
| Total—1968-69 ..     | 942    | 9,182      | 7,122                | 4,048              | 1,189            | 1,267                | 5,152                 | 5,793          |
| <b>Trusts—</b>       |        |            |                      |                    |                  |                      |                       |                |
| <b>\$</b>            |        |            |                      |                    |                  |                      |                       |                |
| Loss .. ..           | 14     | -12        | 23                   | 3                  | 1                | 6                    | 3                     | 7              |
| Nil Income ..        | 89     | ..         | 15                   | ..                 | 6                | 1                    | ..                    | ..             |
| 1- 1,999 ..          | 111    | 79         | 3                    | 6                  | ..               | 1                    | ..                    | ..             |
| 2,000- 3,999 ..      | 28     | 79         | 8                    | 6                  | 6                | ..                   | 1                     | 1              |
| 4,000- 5,999 ..      | 10     | 50         | 19                   | ..                 | ..               | 1                    | ..                    | ..             |
| 6,000- 7,999 ..      | 6      | 40         | 18                   | 1                  | ..               | 1                    | 1                     | ..             |
| 8,000- 9,999 ..      | 1      | 9          | ..                   | ..                 | ..               | ..                   | ..                    | ..             |
| 10,000-19,999 ..     | 5      | 72         | ..                   | ..                 | ..               | ..                   | ..                    | ..             |
| 20,000-29,999 ..     | 1      | 22         | ..                   | ..                 | ..               | ..                   | ..                    | ..             |
| 30,000-39,999 ..     | 3      | 105        | 47                   | 7                  | ..               | 6                    | 1                     | 1              |
| 40,000 and over ..   | ..     | ..         | ..                   | ..                 | ..               | ..                   | ..                    | ..             |
| Total—1969-70 ..     | 268    | 445        | 133                  | 22                 | 14               | 17                   | 5                     | 8              |
| Total—1968-69 ..     | 227    | 505        | 198                  | 37                 | 43               | 22                   | 3                     | 10             |

Note: Figures for income year 1970-71 are not yet available.



## 3. PARTNERSHIPS AND TRUSTS: NUMBER, NET INCOME, DEPRECIABLE ASSETS, DEPRECIATION ALLOWED AND TRADING STOCK, CLASSIFIED BY INDUSTRY FOR INCOME YEAR 1969-70

| Industry  | Partnerships | Trusts | Net income | Depreciable assets   |                    |                  | Depreciation allowed | Trading stock on hand |                |
|---|--------------|--------|------------|----------------------|--------------------|------------------|----------------------|-----------------------|----------------|
|   |              |        |            | At beginning of year | Bought during year | Sold during year |                      | At beginning of year  | At end of year |
|   | Number       | Number | \$'000     | \$'000               | \$'000             | \$'000           | \$'000               | \$'000                |                |
| Primary production ..                               | 150          | 39     | 2,100      | 2,514                | 918                | 603              | 396                  | 461                   | 411            |
| Mining and quarrying ..                             | 3            | 1      | ..         | 24                   | 29                 | 31               | 7                    | 1                     | ..             |
| Manufacturing ..                                    | 34           | ..     | 360        | 202                  | 199                | 81               | 39                   | 99                    | 75             |
| Electricity, gas, water and sanitary services ..    | ..           | ..     | ..         | ..                   | ..                 | ..               | ..                   | ..                    | ..             |
| Building and construction ..                        | 40           | ..     | 2,145      | 372                  | 5,148              | 312              | 2,334                | 126                   | 165            |
| Transport and storage ..                            | 87           | 2      | 787        | 1,199                | 982                | 276              | 339                  | 131                   | 173            |
| Communication ..                                    | ..           | ..     | ..         | ..                   | ..                 | ..               | ..                   | ..                    | ..             |
| Finance and property ..                             | 364          | 207    | 1,234      | 1,509                | 766                | 139              | 160                  | 104                   | 45             |
| Commerce ..   | 353          | 11     | 3,715      | 2,596                | 1,496              | 445              | 457                  | 4,147                 | 4,231          |
| Public authority, n.e.i. ..                         | ..           | ..     | ..         | ..                   | ..                 | ..               | ..                   | ..                    | ..             |
| Religious and social ..                             | ..           | ..     | ..         | ..                   | ..                 | ..               | ..                   | ..                    | ..             |
| Health ..   | 5            | 1      | 179        | 9                    | 11                 | 10               | 10                   | ..                    | ..             |
| Education ..  | ..           | ..     | ..         | ..                   | ..                 | ..               | ..                   | ..                    | ..             |
| Other community and business services ..            | 40           | ..     | 604        | 242                  | 133                | 75               | 38                   | ..                    | ..             |
| Amusements, hotels, etc. ..                         | 45           | 7      | 304        | 226                  | 99                 | 66               | 24                   | 11                    | 37             |
| Other industries including industries not stated .. | 3            | ..     | 27         | 15                   | 14                 | ..               | 4                    | 820                   | 500            |
| Total 1969-70 ..                                    | 1,124        | 268    | 11,455     | 8,908                | 9,795              | 2,035            | 3,808                | 5,900                 | 5,637          |
| Total 1968-69 ..                                    | 942          | 227    | 9,686      | 7,319                | 4,084              | 1,233            | 1,288                | 5,158                 | 5,804          |

Note: Figures for income year 1970-71 are not yet available.

4. RESIDENT INDIVIDUAL TAXPAYERS: NUMBER, TAXABLE INCOME AND NET INCOME TAX ASSESSED, CLASSIFIED BY SEX AND GRADE OF ACTUAL INCOME FOR INCOME YEAR 1969-70

| Grade of Actual Income | Taxpayers |         |         | Taxable income   |         |         |              |         |         |        |         |         | Net income tax assessed |         |         |
|------------------------|-----------|---------|---------|------------------|---------|---------|--------------|---------|---------|--------|---------|---------|-------------------------|---------|---------|
|                        |           |         |         | Salary and wages |         |         | Other income |         |         | Total  |         |         |                         |         |         |
|                        | Males     | Females | Persons | Males            | Females | Persons | Males        | Females | Persons | Males  | Females | Persons | Males                   | Females | Persons |
|                        | Number    | Number  | Number  | \$'000           | \$'000  | \$'000  | '\$000       | \$'000  | \$'000  | \$'000 | \$'000  | \$'000  | \$'000                  | \$'000  | \$'000  |
| \$ 209- 399 .. ..      | 121       | 55      | 176     | 34               | 13      | 47      | ..           | ..      | ..      | 34     | 13      | 47      | ..                      | ..      | ..      |
| 400- 599 .. ..         | 30        | 15      | 45      | 10               | 4       | 15      | ..           | 1       | 1       | 10     | 5       | 15      | ..                      | ..      | ..      |
| 600- 799 .. ..         | 2         | 3       | 5       | 1                | 1       | 2       | 1            | 1       | 2       | 1      | 2       | 4       | ..                      | ..      | ..      |
| 800- 999 .. ..         | 30        | 12      | 42      | 24               | 2       | 26      | ..           | 3       | 4       | 24     | 6       | 30      | 1                       | ..      | 1       |
| 1,000- 1,199 .. ..     | 180       | 82      | 262     | 165              | 60      | 225     | 3            | 7       | 10      | 169    | 67      | 236     | 5                       | 2       | 6       |
| 1,200- 1,399 .. ..     | 222       | 163     | 385     | 236              | 153     | 388     | 2            | 4       | 6       | 238    | 156     | 394     | 7                       | 4       | 12      |
| 1,400- 1,599 .. ..     | 318       | 342     | 660     | 341              | 323     | 664     | 10           | 24      | 34      | 351    | 347     | 699     | 11                      | 10      | 22      |
| 1,600- 1,799 .. ..     | 397       | 408     | 805     | 493              | 430     | 922     | 8            | 36      | 44      | 501    | 466     | 967     | 19                      | 16      | 34      |
| 1,800- 1,999 .. ..     | 379       | 376     | 755     | 504              | 467     | 971     | 20           | 26      | 47      | 524    | 494     | 1,018   | 21                      | 19      | 41      |
| 2,000- 2,199 .. ..     | 407       | 410     | 817     | 593              | 569     | 1,162   | 22           | 38      | 59      | 615    | 607     | 1,221   | 28                      | 26      | 54      |
| 2,200- 2,399 .. ..     | 426       | 357     | 783     | 668              | 550     | 1,219   | 21           | 42      | 64      | 690    | 593     | 1,282   | 33                      | 28      | 61      |
| 2,400- 2,599 .. ..     | 489       | 389     | 878     | 839              | 647     | 1,486   | 30           | 58      | 87      | 869    | 705     | 1,573   | 46                      | 37      | 82      |
| 2,600- 2,799 .. ..     | 436       | 423     | 859     | 806              | 799     | 1,605   | 37           | 54      | 91      | 843    | 853     | 1,696   | 47                      | 49      | 96      |
| 2,800- 2,999 .. ..     | 430       | 377     | 807     | 859              | 769     | 1,628   | 32           | 52      | 85      | 892    | 821     | 1,713   | 54                      | 50      | 104     |
| 3,000- 3,999 .. ..     | 2,515     | 1,278   | 3,793   | 5,975            | 3,078   | 9,053   | 297          | 312     | 609     | 6,271  | 3,390   | 9,661   | 437                     | 244     | 681     |
| 4,000- 5,999 .. ..     | 5,291     | 806     | 6,097   | 17,732           | 2,551   | 20,283  | 818          | 507     | 1,325   | 18,550 | 3,058   | 21,608  | 1,687                   | 290     | 1,977   |
| 6,000- 7,999 .. ..     | 3,448     | 243     | 3,691   | 16,175           | 834     | 17,009  | 963          | 495     | 1,458   | 17,138 | 1,330   | 18,468  | 2,049                   | 169     | 2,219   |
| 8,000- 9,999 .. ..     | 1,407     | 97      | 1,504   | 7,839            | 269     | 8,108   | 899          | 430     | 1,329   | 8,739  | 698     | 9,437   | 1,235                   | 110     | 1,345   |
| 10,000-19,999 .. ..    | 961       | 108     | 1,069   | 6,020            | 170     | 6,190   | 3,301        | 1,092   | 4,393   | 9,321  | 1,262   | 10,583  | 1,780                   | 267     | 2,047   |
| 20,000 and over .. ..  | 102       | 18      | 120     | 546              | 21      | 567     | 1,957        | 446     | 2,403   | 2,503  | 467     | 2,970   | 695                     | 132     | 827     |
| Total 1969-70 .. ..    | 17,591    | 5,962   | 23,553  | 59,860           | 11,711  | 71,570  | 8,422        | 3,629   | 12,051  | 68,282 | 15,340  | 83,622  | 8,155                   | 1,454   | 9,609   |
| Total 1968-69 .. ..    | 14,759    | 5,162   | 19,921  | 45,774           | 9,205   | 54,979  | 8,464        | 3,529   | 11,993  | 54,237 | 12,734  | 66,972  | 6,311                   | 1,210   | 7,521   |

Note: Figures for income year 1970-71 are not yet available.

## APPENDIX V—continued

## 5. NON-RESIDENT INDIVIDUAL TAXPAYERS: NUMBER, TAXABLE INCOME AND NET INCOME TAX ASSESSED, CLASSIFIED BY SEX AND GRADE OF ACTUAL INCOME FOR INCOME YEAR 1969-70

| Grade of Actual Income | Taxpayers |         |         | Taxable income   |         |         |              |         |         |        |         |         | Net income tax assessed |         |         |     |
|------------------------|-----------|---------|---------|------------------|---------|---------|--------------|---------|---------|--------|---------|---------|-------------------------|---------|---------|-----|
|                        |           |         |         | Salary and wages |         |         | Other income |         |         | Total  |         |         |                         |         |         |     |
|                        | Males     | Females | Persons | Males            | Females | Persons | Males        | Females | Persons | Males  | Females | Persons | Males                   | Females | Persons |     |
| \$                     | \$        | Number  | Number  | Number           | \$'000  | \$'000  | \$'000       | '\$000  | \$'000  | \$'000 | \$'000  | \$'000  | \$'000                  | \$'000  | \$'000  |     |
| 209- 399 .. ..         |           | 93      | 27      | 120              | 29      | 8       | 37           | ..      | ..      | ..     | 29      | 8       | 37                      | ..      | ..      | ..  |
| 400- 599 .. ..         |           | 150     | 43      | 193              | 66      | 17      | 83           | 8       | 4       | 12     | 74      | 21      | 95                      | 1       | ..      | 1   |
| 600- 799 .. ..         |           | 130     | 25      | 155              | 83      | 14      | 98           | 6       | 3       | 9      | 90      | 17      | 107                     | 2       | ..      | 2   |
| 800- 999 .. ..         |           | 148     | 30      | 178              | 121     | 13      | 134          | 10      | 13      | 24     | 131     | 27      | 158                     | 3       | 1       | 4   |
| 1,000-1,199 .. ..      |           | 116     | 26      | 142              | 116     | 21      | 137          | 10      | 6       | 16     | 126     | 28      | 154                     | 4       | 1       | 5   |
| 1,200-1,399 .. ..      |           | 99      | 8       | 107              | 107     | 8       | 115          | 21      | 3       | 24     | 129     | 10      | 139                     | 5       | ..      | 5   |
| 1,400-1,599 .. ..      |           | 103     | 14      | 117              | 136     | 18      | 155          | 17      | 3       | 20     | 153     | 21      | 174                     | 7       | 1       | 7   |
| 1,600-1,799 .. ..      |           | 79      | 5       | 84               | 124     | 5       | 129          | 8       | 4       | 12     | 132     | 9       | 141                     | 6       | ..      | 7   |
| 1,800-1,999 .. ..      |           | 76      | 8       | 84               | 132     | 9       | 141          | 12      | 6       | 18     | 144     | 15      | 158                     | 8       | 1       | 9   |
| 2,000-2,199 .. ..      |           | 58      | 5       | 63               | 107     | 6       | 113          | 14      | 4       | 18     | 120     | 10      | 130                     | 7       | 1       | 8   |
| 2,200-2,399 .. ..      |           | 41      | 4       | 45               | 87      | 7       | 94           | 7       | 2       | 9      | 93      | 9       | 103                     | 6       | 1       | 6   |
| 2,400-2,599 .. ..      |           | 38      | 2       | 40               | 89      | ..      | 89           | 7       | 5       | 12     | 95      | 5       | 100                     | 6       | ..      | 7   |
| 2,600-2,799 .. ..      |           | 31      | 1       | 32               | 77      | 2       | 79           | 5       | ..      | 5      | 82      | 2       | 84                      | 6       | ..      | 6   |
| 2,800-2,999 .. ..      |           | 20      | 10      | 30               | 52      | 8       | 60           | 6       | 21      | 27     | 58      | 29      | 87                      | 4       | 2       | 7   |
| 3,000-3,999 .. ..      |           | 61      | 13      | 74               | 175     | 14      | 189          | 26      | 30      | 56     | 201     | 44      | 244                     | 17      | 4       | 21  |
| 4,000-5,999 .. ..      |           | 47      | 9       | 56               | 160     | 23      | 183          | 58      | 19      | 78     | 219     | 42      | 261                     | 24      | 5       | 29  |
| 6,000-7,999 .. ..      |           | 15      | 3       | 18               | 47      | ..      | 47           | 57      | 21      | 78     | 103     | 21      | 125                     | 16      | 3       | 19  |
| 8,000-9,999 .. ..      |           | 5       | 4       | 9                | 17      | 1       | 17           | 28      | 36      | 63     | 44      | 36      | 80                      | 8       | 7       | 14  |
| 10,000-19,999 .. ..    |           | 11      | 1       | 12               | 37      | ..      | 37           | 107     | 10      | 118    | 144     | 10      | 155                     | 32      | 2       | 34  |
| 20,000 and over .. ..  |           | 6       | ..      | 6                | ..      | ..      | ..           | 233     | ..      | 233    | 233     | ..      | 233                     | 76      | ..      | 76  |
| Total 1969-70 .. ..    |           | 1,327   | 238     | 1,565            | 1,761   | 174     | 1,935        | 640     | 190     | 830    | 2,401   | 365     | 2,765                   | 237     | 29      | 266 |
| Total 1968-69 .. ..    |           | 720     | 214     | 934              | 675     | 98      | 772          | 727     | 310     | 1,037  | 1,402   | 407     | 1,809                   | 167     | 42      | 209 |

Note: Figures for income year 1970-71 are not yet available.

6. TAXABLE COMPANIES (RESIDENT AND NON-RESIDENT): NUMBER, TAXABLE INCOME, NET TAX ASSESSED, DIVIDENDS, DEPRECIABLE ASSETS, DEPRECIATION ALLOWED AND TRADING STOCK, CLASSIFIED BY INDUSTRY FOR INCOME YEAR 1969-70

| Industry   | Companies | Taxable income | Net income tax assessed | Dividends |                               | Depreciable assets   |                    |                  | Depreciation allowed | Trading stock on hand |                |
|--|-----------|----------------|-------------------------|-----------|-------------------------------|----------------------|--------------------|------------------|----------------------|-----------------------|----------------|
|  |           |                |                         | Paid      | Included in assessable income | At beginning of year | Bought during year | Sold during year |                      | At beginning of year  | At end of year |
|  | Number    | \$'000         | \$'000                  | \$'000    | \$'000                        | \$'000               | \$'000             | \$'000           | \$'000               | \$'000                | \$'000         |
| Primary production .. ..                               | 143       | 7,961          | 1,688                   | 3,810     | 538                           | 9,585                | 2,645              | 232              | 1,354                | 3,996                 | 3,806          |
| Mining and quarrying .. ..                             | 8         | 90             | 20                      | 13        | ..                            | 164                  | 138                | 8                | 66                   | 10                    | 10             |
| Manufacturing .. ..                                    | 89        | 8,035          | 1,700                   | 2,753     | 479                           | 8,685                | 6,744              | 1,588            | 1,543                | 3,739                 | 4,350          |
| Electricity, gas, water and sanitary services .. ..    | 2         | 58             | 13                      | ..        | ..                            | 192                  | 57                 | 9                | 26                   | 6                     | 1              |
| Building and construction .. ..                        | 100       | 7,145          | 1,590                   | 332       | 61                            | 5,095                | 7,041              | 556              | 2,014                | 898                   | 1,548          |
| Transport and storage .. ..                            | 93        | 4,575          | 1,029                   | 390       | 1                             | 7,046                | 5,493              | 531              | 2,049                | 123                   | 142            |
| Finance and property .. ..                             | 278       | 7,589          | 860                     | 1,795     | 3,916                         | 5,272                | 6,733              | 381              | 1,455                | 83                    | 65             |
| Commerce .. ..   | 284       | 17,279         | 3,739                   | 3,955     | 1,047                         | 20,384               | 8,320              | 768              | 2,807                | 36,503                | 39,633         |
| Other community and business services .. ..            | 29        | 666            | 127                     | 26        | 3                             | 514                  | 307                | 73               | 90                   | 14                    | 27             |
| Amusements, hotels, etc. .. ..                         | 57        | 1,497          | 332                     | 274       | 34                            | 3,234                | 1,897              | 19               | 276                  | 198                   | 230            |
| Other industries including industries not stated .. .. | 4         | 26             | 6                       | 5         | ..                            | 3                    | 48                 | 1                | 5                    | 1                     | 8              |
| Total 1969-70 .. ..                                    | 1,087     | 54,921         | 11,105                  | 13,354    | 6,077                         | 60,175               | 39,423             | 4,164            | 11,685               | 45,571                | 49,819         |
| Total 1968-69 .. ..                                    | 963       | 42,890         | 8,714                   | 12,919    | 4,580                         | 48,286               | 22,450             | 3,151            | 7,898                | 39,886                | 46,294         |

Note: Figures for income year 1970-71 are not yet available.

7. NON-TAXABLE COMPANIES: NUMBER, NON-TAXABLE INCOME, NET LOSS, DIVIDENDS, DEPRECIABLE ASSETS, DEPRECIATION ALLOWED AND TRADING STOCK,  
CLASSIFIED BY INDUSTRY FOR INCOME YEAR 1969-70

| Industry   | Companies | Non-taxable income | Net loss | Dividends |                               | Depreciable assets   |                    |                  | Depreciation allowed | Trading stock on hand |                |
|--|-----------|--------------------|----------|-----------|-------------------------------|----------------------|--------------------|------------------|----------------------|-----------------------|----------------|
|  |           |                    |          | Paid      | Included in assessable income | At beginning of year | Bought during year | Sold during year |                      | At beginning of year  | At end of year |
|  | Number    | \$'000             | \$'000   | \$'000    | \$'000                        | \$'000               | \$'000             | \$'000           | \$'000               | \$'000                | \$'000         |
| Primary production .. ..                               | 59        | 191                | 1,691    | 45        | 3                             | 3,064                | 2,390              | 139              | 659                  | 369                   | 568            |
| Mining and quarrying .. ..                             | 22        | 51                 | 3,635    | 5         | 6                             | 198                  | 95                 | 12               | 39                   | 16                    | 30             |
| Manufacturing .. ..                                    | 65        | 856                | 413      | 287       | ..                            | 2,997                | 245                | 59               | 496                  | 657                   | 556            |
| Electricity, gas, water and sanitary services .. ..    | 1         | 104                | ..       | 100       | ..                            | 298                  | 142                | 21               | 43                   | 19                    | 26             |
| Building and construction .. ..                        | 35        | 117                | 503      | ..        | ..                            | 508                  | 431                | 51               | 114                  | 188                   | 709            |
| Transport and storage .. ..                            | 55        | 34                 | 1,143    | 94        | ..                            | 3,997                | 5,743              | 442              | 1,122                | 119                   | 207            |
| Finance and property .. ..                             | 260       | 2,715              | 473      | 1,144     | 2,976                         | 2,739                | 420                | 206              | 238                  | 15                    | 1              |
| Commerce .. ..   | 161       | 144                | 625      | 108       | 16                            | 1,261                | 1,016              | 132              | 227                  | 2,186                 | 2,988          |
| Other community and business services .. ..            | 8         | 3                  | 12       | 5         | ..                            | 29                   | 8                  | 7                | 5                    | 3                     | 5              |
| Amusements, hotels, etc. .. ..                         | 21        | 21                 | 92       | 5         | ..                            | 1,010                | 365                | 4                | 89                   | 82                    | 77             |
| Other industries including industries not stated .. .. | 4         | ..                 | 6        | ..        | ..                            | 41                   | 3                  | 31               | 9                    | ..                    | ..             |
| Total 1969-70 .. ..                                    | 691       | 4,235              | 8,593    | 1,794     | 3,001                         | 16,143               | 10,858             | 1,103            | 3,041                | 3,654                 | 5,168          |
| Total 1968-69 .. ..                                    | 628       | 3,805              | 4,015    | 730       | 2,589                         | 12,812               | 7,865              | 1,181            | 2,592                | 2,592                 | 2,580          |

Note: Figures for income year 1970-71 are not yet available.

APPENDIX V—continued

8. TAXABLE COMPANIES (RESIDENT AND NON-RESIDENT): NUMBER, TAXABLE INCOME, NET TAX ASSESSED, DIVIDENDS, DEPRECIABLE ASSETS, DEPRECIATION ALLOWED AND TRADING STOCK, CLASSIFIED BY GRADE OF TAXABLE INCOME FOR INCOME YEAR 1969-70

| Item  | Grade of taxable income (dollars) |                |                  |                  |                  |                  | Total   |         |  |
|---|-----------------------------------|----------------|------------------|------------------|------------------|------------------|---------|---------|--|
|   | One to 1,999                      | 2,000 to 9,999 | 10,000 to 19,999 | 20,000 to 39,999 | 40,000 to 99,999 | 100,000 and Over | 1969-70 | 1968-69 |  |
| <b>Resident and Non-Resident Companies—</b> |                                   |                |                  |                  |                  |                  |         |         |  |
| Number of companies .. ..                   | 221                               | 304            | 178              | 153              | 132              | 99               | 1,087   | 963     |  |
|   | \$'000                            |                |                  |                  |                  |                  |         |         |  |
| Taxable income .. .. .                      | 161                               | 1,603          | 2,663            | 4,225            | 8,481            | 37,690           | 54,823  | 42,890  |  |
| Net income tax assessed .. ..               | 35                                | 336            | 565              | 915              | 1,842            | 7,414            | 11,105  | 8,714   |  |
| Dividends—                                  |                                   |                |                  |                  |                  |                  |         |         |  |
| Paid .. .. .                                | 77                                | 537            | 245              | 549              | 1,510            | 10,436           | 13,354  | 12,919  |  |
| Included in assessable income .. ..         | 5                                 | 132            | 144              | 223              | 344              | 5,229            | 6,077   | 4,580   |  |
| Depreciable assets—                         |                                   |                |                  |                  |                  |                  |         |         |  |
| At beginning of year .. .. .                | 1,283                             | 4,705          | 3,879            | 5,486            | 9,946            | 34,877           | 60,175  | 48,286  |  |
| Bought during year .. .. .                  | 796                               | 3,278          | 4,140            | 2,689            | 4,822            | 23,699           | 39,423  | 22,450  |  |
| Sold during year .. .. .                    | 87                                | 343            | 1,579            | 321              | 257              | 1,578            | 4,164   | 3,151   |  |
| Depreciation allowed .. .. .                | 195                               | 992            | 685              | 937              | 1,510            | 7,361            | 11,685  | 7,898   |  |
| Trading stock on hand—                      |                                   |                |                  |                  |                  |                  |         |         |  |
| At beginning of year .. .. .                | 291                               | 2,110          | 2,052            | 3,415            | 5,065            | 32,639           | 45,571  | 39,886  |  |
| At end of year .. .. .                      | 367                               | 3,174          | 2,492            | 3,375            | 7,018            | 33,393           | 49,819  | 46,294  |  |
| <b>Resident Companies—</b>                  |                                   |                |                  |                  |                  |                  |         |         |  |
| Number of companies .. .. .                 | 188                               | 256            | 160              | 143              | 118              | 80               | 945     | 849     |  |
|   | \$'000                            |                |                  |                  |                  |                  |         |         |  |
| Taxable income .. .. .                      | 131                               | 1,380          | 2,397            | 3,961            | 7,461            | 29,175           | 44,504  | 35,734  |  |
| Net income tax assessed .. .. .             | 28                                | 287            | 508              | 856              | 1,654            | 5,871            | 9,204   | 7,447   |  |
| Dividends—                                  |                                   |                |                  |                  |                  |                  |         |         |  |
| Paid .. .. .                                | 75                                | 484            | 228              | 549              | 1,353            | 10,108           | 12,798  | 12,347  |  |
| Included in assessable income .. ..         | 4                                 | 107            | 132              | 175              | 161              | 3,056            | 3,635   | 2,615   |  |
| Depreciable assets—                         |                                   |                |                  |                  |                  |                  |         |         |  |
| At beginning of year .. .. .                | 1,283                             | 4,688          | 3,849            | 5,416            | 9,478            | 29,611           | 54,324  | 41,345  |  |
| Bought during year .. .. .                  | 795                               | 3,258          | 2,789            | 2,678            | 4,724            | 18,379           | 32,621  | 20,811  |  |
| Sold during year .. .. .                    | 87                                | 343            | 322              | 321              | 250              | 1,453            | 2,776   | 2,535   |  |
| Depreciation allowed .. .. .                | 195                               | 989            | 593              | 930              | 1,414            | 6,010            | 10,135  | 6,772   |  |
| Trading stock on hand—                      |                                   |                |                  |                  |                  |                  |         |         |  |
| At beginning of year .. .. .                | 291                               | 2,110          | 2,051            | 3,415            | 4,441            | 30,991           | 43,298  | 37,253  |  |
| At end of year .. .. .                      | 367                               | 3,174          | 2,489            | 3,375            | 6,272            | 31,075           | 46,752  | 43,988  |  |
| <b>Non-Resident companies—</b>              |                                   |                |                  |                  |                  |                  |         |         |  |
| Number of companies .. .. .                 | 33                                | 48             | 18               | 10               | 14               | 19               | 142     | 114     |  |
|   | \$'000                            |                |                  |                  |                  |                  |         |         |  |
| Taxable income .. .. .                      | 30                                | 223            | 266              | 264              | 1,020            | 8,515            | 10,319  | 7,156   |  |
| Net income tax assessed .. .. .             | 7                                 | 49             | 57               | 57               | 188              | 1,543            | 1,901   | 1,267   |  |
| Dividends—                                  |                                   |                |                  |                  |                  |                  |         |         |  |
| Paid .. .. .                                | 2                                 | 53             | 17               | ..               | 157              | 328              | 556     | 572     |  |
| Included in assessable income .. ..         | 1                                 | 25             | 12               | 48               | 183              | 2,173            | 2,442   | 1,965   |  |
| Depreciable assets—                         |                                   |                |                  |                  |                  |                  |         |         |  |
| At beginning of year .. .. .                | ..                                | 17             | 30               | 70               | 468              | 5,266            | 5,851   | 6,941   |  |
| Bought during year .. .. .                  | 1                                 | 20             | 1,351            | 11               | 98               | 5,320            | 6,801   | 1,639   |  |
| Sold during year .. .. .                    | ..                                | ..             | 1,257            | ..               | 7                | 125              | 1,388   | 616     |  |
| Depreciation allowed .. .. .                | ..                                | 3              | 92               | 7                | 96               | 1,351            | 1,549   | 1,126   |  |
| Trading stock on hand—                      |                                   |                |                  |                  |                  |                  |         |         |  |
| At beginning of year .. .. .                | ..                                | ..             | 1                | ..               | 624              | 1,648            | 2,273   | 2,633   |  |
| At end of year .. .. .                      | ..                                | ..             | 3                | ..               | 746              | 2,318            | 3,067   | 2,306   |  |

## APPENDIX VI

### MONEY AND BANKING

(A) Accurate information as to the total amount of currency in circulation in Papua New Guinea is not available.

(B) The foreign exchange requirements of Papua New Guinea are provided through the banking system of the Administering Authority.

(C) The rates of interest, other than on Papua New Guinea Securities and Savings Certificates (of Papua New Guinea) and Advances provided by the Papua and New Guinea Development Bank, applying in Papua New Guinea at 30 June 1972 were the same as the rates applying in Australia. The rates are set out below:

| Item   | Rate per annum |
|--|----------------|
|  | Per cent       |
| <b>Lending Rates—</b>                                  |                |
| Reserve Bank of Australia—                             |                |
| Rural Credits Department—                              |                |
| Government guaranteed loans .. .. .                    | 5.00           |
| Other .. .. .  | 5.25           |
| Papua New Guinea Development Bank—                     |                |
| New Term Loans—  |                |
| Under \$3,000 .. .. .                                  | 6.75(a)        |
| Over \$3,000 .. .. .                                   | 9.25(a)        |
| Trading Banks—   |                |
| Overdraft (general) .. .. .                            | 7.75(a)(b)     |
| Unsecured personal loans .. .. .                       | 6.25(a)        |
| Savings Bank—  |                |
| Housing loans to individuals .. .. .                   | 6.25–7.00(c)   |
| Other loans .. .. .                                    | Up to 7.75     |
| Life Assurance Companies—Loans on own policies .. .. . | 8.00(e)        |
| <b>Deposit Rates—</b>                                  |                |
| Trading Banks—Fixed Deposits—                          |                |
| Less than \$50,000(a)—                                 |                |
| 3 months and less than 12 months .. .. .               | 4.30           |
| 12 months and less than 18 months .. .. .              | 4.50           |
| 18 months and less than 24 months .. .. .              | 4.50           |
| 24 months .. .. .                                      | 5.00           |
| More than 24 months and less than 36 months .. .. .    | 5.00           |
| 36 months and less than 48 months .. .. .              | 5.00           |
| 48 months .. .. .                                      | 5.50           |
| \$80,000 and over .. .. .                              | 6.50           |
| Savings Banks—   |                |
| Ordinary Accounts—                                     |                |
| To \$4,000 .. .. .                                     | 3.75–5.00(c)   |
| Over \$4,000 .. .. .                                   | 4.25–5.00(c)   |
| Investment accounts .. .. .                            | 5.00(d)        |
| Commonwealth Securities—                               |                |
| Commonwealth Loans—                                    |                |
| 20 year bond (non-rebatable) .. .. .                   | 5.99           |
| 10 year bond (non-rebatable) .. .. .                   | 5.85           |
| 5 year bond (non-rebatable) .. .. .                    | 5.50           |
| 2 year bond (non-rebatable) .. .. .                    | 5.05           |
| Treasury Notes—  |                |
| 13 weeks maturity .. .. .                              | 4.50           |
| 26 weeks maturity .. .. .                              | 4.66           |

(a) Maximum rates (b) From 4 February 1972 the maximum rate applies only to loans drawn under limits of less than \$50,000. (c) Range of rates predominantly changed. (d) Subject to special notice and minimum balance requirements. (e) Reducing principle.

APPENDIX VI—continued

(D) The rates of interest applicable to Premium Securities and Savings Securities:

| Date of issue                                 | Series | Interest rate  |
|---|--------|--|
| 10 June 1964 .. ..                            | 6      | 4.50 per cent to 31 December 1966<br>4.75 per cent to 31 December 1969<br>5.25 per cent to maturity, 1 January 1972  |
| 9 June 1965 .. ..                             | 7      | 5.00 per cent to 31 December 1967<br>5.25 per cent to 31 December 1970<br>5.75 per cent to maturity, 1 January 1973  |
| 14 February 1966 .. ..                        | 8      | 5.00 per cent to 30 September 1968<br>5.20 per cent to 30 September 1971<br>5.80 per cent to maturity, 1 October 1973  |
| 1 March 1967 .. ..                            | 9      | 5.00 per cent to 30 September 1969<br>5.20 per cent to 30 September 1972<br>5.80 per cent to maturity, 1 October 1974  |
| 27 November 1967 .. ..                        | 10     | 5.00 per cent to 31 May 1970<br>5.30 per cent to 31 July 1972<br>5.70 per cent to maturity, 1 June 1975  |
| 2 September 1968 .. ..                        | 11     | 5.10 per cent to 31 January 1971<br>5.50 per cent to 31 January 1973<br>5.70 per cent to maturity 1 February 1976  |
| 16 June 1969 .. ..                            | 12     | 5.10 per cent to 30 November 1971<br>5.50 per cent to 30 November 1973<br>5.70 per cent to maturity 1 December 1976  |
| 25 August 1969 .. ..                          | 13     | 5.30 per cent to 31 January 1972<br>5.70 per cent to 31 January 1974<br>6.10 per cent to maturity, 1 February 1977   |
| 8 June 1970 .. ..                             | 14     | 6.60 per cent to 31 October 1972<br>6.80 per cent to 31 October 1974<br>7.20 per cent to maturity, 1 November 1977   |
| 15 February 1971 .. ..                        | 15     | 6.60 per cent to 30 June 1973<br>6.80 per cent to 30 June 1975<br>7.20 per cent to maturity, 1 July 1978   |
| Savings Securities—<br>20 December 1971 .. .. | 1      | 5.00 per cent to 31 December 1972<br>5.40 per cent to 31 December 1973<br>5.80 per cent to 31 December 1974<br>6.30 per cent to 31 December 1975<br>7.40 per cent to 31 December 1976<br>8.60 per cent to 31 December 1977<br>10.00 per cent to maturity, 1 January 1979 |

After three months from the date of issue\* Territory Savings Certificates could be cashed for the following amounts for each \$2 purchase price:

| After the date of issue                                  | Series 1 | Series 2 | Series 3 |
|--|----------|----------|----------|
|  | \$       | \$       | \$       |
| Within 1 year .. ..                                      | 2.00     | 2.00     | 2.00     |
| On or after the end of 1 year but within 2 years .. ..   | 2.08     | 2.10     | 2.10     |
| On or after the end of 2 years but within 3 years .. ..  | 2.18     | 2.21     | 2.20     |
| On or after the end of 3 years but within 4 years .. ..  | 2.29     | 2.33     | 2.30     |
| On or after the end of 4 years but before maturity .. .. | 2.41     | 2.47     | 2.42     |
| At or after maturity .. ..                               | 2.56     | 2.62     | 2.55     |

\* Sales of Territory Savings Certificates ceased on 14 February 1966.

(E) There are four trading banks operating in Papua New Guinea: namely, the Commonwealth Trading Bank of Australia and three private trading banks—the Bank of New South Wales, the National Bank of Australasia Ltd and the Australian and New Zealand Banking Group Ltd (formerly the Australia and New Zealand Bank Ltd).

The Reserve Bank of Australia has an office in Port Moresby, where, in addition to carrying out normal reserve bank functions in relation to Papua New Guinea, it maintains a Register of Papua New Guinea Inscribed Stock on behalf of the Administration.



## (F) CLASSIFICATION OF ADVANCES OF TRADING BANKS

| Classification                                      | July<br>1969  | January<br>1970 | July<br>1970  | January<br>1971 | July<br>1971   | January<br>1972 |
|---|---------------|-----------------|---------------|-----------------|----------------|-----------------|
|   | \$'000        | \$'000          | \$'000        | \$'000          | \$'000         | \$'000          |
| <b>Business Advances—</b>                           |               |                 |               |                 |                |                 |
| Agriculture, grazing and dairying .. .. .           | 3,531         | 3,365           | 3,917         | 3,696           | 3,979          | 3,788           |
| Manufacturing .. .. .                               | 1,076         | 1,401           | 2,191         | 2,493           | 2,970          | 2,861           |
| Transport, storage and communications .. .. .       | 1,813         | 2,167           | 1,680         | 1,554           | 1,651          | 1,179           |
| Building and construction .. .. .                   | 2,011         | 2,127           | 2,062         | 1,917           | 1,975          | 1,957           |
| Commercial .. .. .                                  | 8,868         | 9,637           | 9,306         | 58,309          | 87,059         | 87,210          |
| Other business .. .. .                              | 4,204         | 4,524           | 4,869         |                 |                |                 |
| Unclassified .. .. .                                | 252           | 339             | 417           | 362             | ..             | ..              |
| <b>Total .. .. .</b>                                | <b>21,755</b> | <b>23,560</b>   | <b>24,442</b> | <b>68,331</b>   | <b>84,270</b>  | <b>95,995</b>   |
| <b>Personal Advances—</b>                           |               |                 |               |                 |                |                 |
| Building or buying own home .. .. .                 | 636           | 570             | 465           | 432             | 521            | 527             |
| Other .. .. .                                       | 2,319         | 2,492           | 2,776         | 2,626           | 2,735          | 3,039           |
| <b>Total .. .. .</b>                                | <b>2,955</b>  | <b>3,062</b>    | <b>3,241</b>  | <b>3,058</b>    | <b>3,256</b>   | <b>3,566</b>    |
| <b>Advances to Public Authorities, etc. .. .. .</b> | <b>1,812</b>  | <b>1,581</b>    | <b>1,528</b>  | <b>1,316</b>    | <b>1,379</b>   | <b>1,137</b>    |
| <b>Total .. .. .</b>                                | <b>26,522</b> | <b>28,203</b>   | <b>29,211</b> | <b>72,705</b>   | <b>102,269</b> | <b>101,698</b>  |

## APPENDIX VII

### COMMERCE AND TRADE

NOTE: Detailed information on Papua New Guinea's overseas trade (including by countries of origin and destination of imports and exports) is available in the annual bulletin—*Overseas Trade Statistics: Volume 1—Trade by Countries and Volume 2—Trade by Ports*—published by the Bureau of Statistics, Konedobu, Papua. Copies of the bulletins have been supplied to the Secretary-General of the United Nations.

The following tables show combined statistics for Papua New Guinea.

#### I. VALUE OF OVERSEAS TRADE FOR YEARS ENDED 30 JUNE 1967 TO 1971 (\$'000)

| Particulars                             | Year ended 30 June |         |         |         |         |
|---|--------------------|---------|---------|---------|---------|
|   | 1967               | 1968    | 1969    | 1970(p) | 1971    |
| Imports—                                |                    |         |         |         |         |
| Imports (excluding outside packages) .. | 125,822            | 143,510 | 148,220 | 210,648 | 251,564 |
| Outside packages .. .. . (a)            | 209                | 1,793   | 2,235   | 2,403   | 3,035   |
| Total .. .. .                           | 126,031            | 145,303 | 150,455 | 213,051 | 254,599 |
| Exports—                                |                    |         |         |         |         |
| Territory produce .. .. .               | 45,679             | 59,059  | 64,890  | 71,443  | 77,447  |
| Re-exports .. .. .                      | 7,541              | 11,191  | 10,354  | 22,117  | 24,485  |
| Total .. .. .                           | 53,220             | 70,250  | 75,244  | 93,560  | 101,932 |
| Total trade .. .. .                     | 179,251            | 215,553 | 225,699 | 306,611 | 356,531 |

(a) Only outside packages of value of \$1,000 and over were shown in this figure. All other outside packages were included with the individual commodity imported.

- Notes: (1) Separate particulars of private and Government imports and exports are not available.  
 (2) Figures for year ended 30 June 1972 are not yet available.

#### 2. EXPORTS AND IMPORTS: VALUE BY STATISTICAL SECTION FOR YEAR ENDED 30 JUNE 1971 (\$A'000)

| Section   | Imports | Exports |
|---|---------|---------|
| 1. Food and live animals .. .. .                              | 41,474  | 39,846  |
| 2. Beverages and tobacco .. .. .                              | 6,304   | 57      |
| 3. Crude materials, inedible, except fuel .. .. .             | 1,008   | 24,755  |
| 4. Mineral fuels, lubricants and related materials .. .. .    | 8,655   | ..      |
| 5. Animal and vegetable oils and fats .. .. .                 | 258     | 7,805   |
| 6. Chemicals and chemical products .. .. .                    | 11,417  | 406     |
| 7. Manufactured goods, classified chiefly by material .. .. . | 45,787  | 3,655   |
| 8. Machinery and transport equipment .. .. .                  | 101,417 | 4       |
| 9. Miscellaneous manufactured articles .. .. .                | 25,427  | 176     |
| 10. Miscellaneous commodities and transactions .. .. .        | 9,817   | 743     |
| Total .. .. .   | 251,564 | 77,447  |
| Outside packages .. .. .                                      | 3,034   | ..      |
| Re-exports .. .. .  | ..      | 24,485  |
| Total .. .. .   | 259,599 | 101,932 |

Note: Figures for year ended 30 June 1972 are not yet available.

3. VALUE OF IMPORTS BY COUNTRY OF ORIGIN FOR YEARS ENDED  
30 JUNE 1970 AND 1971  
(\$A '000 f.o.b. port of shipment)

| Country of origin(a)                                | 1970(r)        | 1971           |
|---|----------------|----------------|
| Argentina .. .. .                                   | 210            | 75             |
| Australia .. .. .                                   | 114,332        | 130,395        |
| Austria .. .. .                                     | 64             | 98             |
| Belgium-Luxembourg .. .. .                          | 221            | 149            |
| Canada .. .. .                                      | 3,012          | 2,066          |
| Ceylon .. .. .                                      | 342            | 329            |
| China, Republic of (Taiwan) .. .. .                 | 139            | 129            |
| China, People's Republic of .. .. .                 | 2,254          | 2,201          |
| Czechoslovakia .. .. .                              | 184            | 137            |
| Denmark .. .. .                                     | 212            | 273            |
| Fiji .. .. .  | 73             | 39             |
| Finland .. .. .                                     | 95             | 96             |
| France .. .. .                                      | 1,668          | 1,031          |
| Germany, Democratic Republic of .. .. .             | 158            | 140            |
| Germany, Federal Republic of .. .. .                | 3,933          | 3,893          |
| Hong Kong .. .. .                                   | 5,654          | 7,542          |
| Hungary .. .. .                                     | 80             | 58             |
| India .. .. .                                       | 247            | 269            |
| Indonesia .. .. .                                   | 92             | 6              |
| Iran .. .. .  | 391            | 807            |
| Ireland .. .. .                                     | 13             | 9              |
| Italy .. .. .                                       | 1,122          | 895            |
| Jamaica .. .. .                                     | 9              | 17             |
| Japan .. .. .                                       | 26,393         | 43,650         |
| Korea, Republic of .. .. .                          | 169            | 45             |
| Macao .. .. .                                       | 19             | 19             |
| Malawi .. .. .                                      | 267            | 326            |
| Malaysia .. .. .                                    | 344            | 285            |
| Mexico .. .. .                                      | 124            | 185            |
| Netherlands .. .. .                                 | 2,046          | 2,795          |
| New Zealand .. .. .                                 | 2,618          | 2,727          |
| Norway .. .. .                                      | 74             | 83             |
| Pakistan .. .. .                                    | 619            | 315            |
| Philippines .. .. .                                 | 61             | 65             |
| Poland .. .. .                                      | 10             | 8              |
| Portugal .. .. .                                    | 24             | 43             |
| Saudi Arabia .. .. .                                | 988            | 1,071          |
| Solomon Islands .. .. .                             | 87             | 39             |
| Singapore .. .. .                                   | 5,348          | 6,400          |
| South Africa .. .. .                                | 111            | 68             |
| Spain .. .. .                                       | 35             | 53             |
| Sweden .. .. .                                      | 613            | 640            |
| Switzerland .. .. .                                 | 492            | 401            |
| Thailand .. .. .                                    | 143            | 140            |
| United Kingdom .. .. .                              | 12,347         | 9,823          |
| United States of America .. .. .                    | 22,556         | 29,585         |
| Union of Soviet Socialist Republics .. .. .         | 87             | 70             |
| Other countries .. .. .                             | 1,161          | 3,634          |
| Country of origin unknown at time of import .. .. . | 1,809          | 1,475          |
| <b>Total .. .. .</b>                                | <b>213,051</b> | <b>254,599</b> |

(a) Denotes country of production, irrespective of country where purchased.  
Note: Figures for year ended 30 June 1972 are not yet available.

## APPENDIX VII—continued

4. VALUE OF EXPORTS BY COUNTRY OF DESTINATION FOR YEAR ENDED  
30 JUNE 1970 AND 1971  
(\$'000 f.o.b. port of shipment)

| Country of destination  | 1970(r) | 1971    |
|---|---------|---------|
| Argentina .. .. .   | ..      | ..      |
| Australia .. .. .   | 41,295  | 43,373  |
| Austria .. .. .   | 2       | 2       |
| Belgium-Luxembourg .. .. .  | 688     | 980     |
| Canada .. .. .  | 533     | 257     |
| Ceylon .. .. .  | ..      | ..      |
| China, Republic of (Taiwan) .. .. .                               | 6       | 98      |
| China, People's Republic of .. .. .                               | ..      | ..      |
| Czechoslovakia .. .. .  | ..      | ..      |
| Denmark .. .. .   | 6       | 2       |
| Fiji .. .. .  | 11      | 81      |
| Finland .. .. .   | ..      | 106     |
| France .. .. .  | 1,462   | 2,346   |
| Germany, Democratic Republic of .. .. .                           | ..      | ..      |
| Germany, Federal Republic of .. .. .                              | 7,549   | 5,377   |
| Hong Kong .. .. .   | 99      | 51      |
| Hungary .. .. .   | ..      | ..      |
| India .. .. .   | 1       | 2       |
| Indonesia .. .. .   | 67      | 527     |
| Iran .. .. .  | ..      | ..      |
| Ireland .. .. .   | 9       | 32      |
| Italy .. .. .   | 209     | 27      |
| Jamaica .. .. .   | 1       | ..      |
| Japan .. .. .   | 8,560   | 11,813  |
| Korea, Republic of .. .. .  | ..      | 63      |
| Macao .. .. .   | ..      | ..      |
| Malawi .. .. .  | ..      | ..      |
| Malaysia .. .. .  | ..      | 4       |
| Mexico .. .. .  | ..      | ..      |
| Netherlands .. .. .   | 4,303   | 2,066   |
| New Zealand .. .. .   | 541     | 554     |
| Norway .. .. .  | ..      | 3       |
| Pakistan .. .. .  | ..      | 2       |
| Philippines .. .. .   | 5       | 229     |
| Poland .. .. .  | ..      | ..      |
| Portugal .. .. .  | ..      | ..      |
| Saudi Arabia .. .. .  | ..      | ..      |
| Solomon Islands .. .. .   | 294     | 216     |
| Singapore .. .. .   | 225     | 177     |
| South Africa .. .. .  | 64      | 296     |
| Spain .. .. .   | 3       | 3       |
| Sweden .. .. .  | 16      | 15      |
| Switzerland .. .. .   | 29      | 31      |
| Thailand .. .. .  | ..      | ..      |
| United Kingdom .. .. .  | 15,394  | 19,567  |
| United States of America .. .. .                                  | 11,076  | 13,337  |
| Union of Soviet Socialist Republics .. .. .                       | ..      | ..      |
| Other countries .. .. .   | 713     | 60      |
| 'For Orders', and destination unknown at time of shipment .. .. . | 399     | 235     |
| Total .. .. .   | 93,560  | 101,932 |

Note: Figures for year ended 30 June 1972 are not yet available.

## APPENDIX VII—continued

5. VALUE OF EXPORTS BY PRINCIPAL COMMODITIES EXPORTED DURING YEARS ENDED 30 JUNE 1967 TO 1971  
(S'000 f.o.b. port of shipment)

| Commodity                            | Year ended 30 June |               |               |                  |                |
|--------------------------------------|--------------------|---------------|---------------|------------------|----------------|
|                                      | 1967               | 1968          | 1969          | 1970(r)          | 1971           |
| Fresh fish .. .. .                   | 25                 | 39            | 60            | 243              | 1,416          |
| Crayfish and prawns .. .. .          | 33                 | 978           | 268           | 659              | 876            |
| Dessicated coconut .. .. .           | ..                 | ..            | 990           | 1,211            | 1,203          |
| Passion fruit juice and pulp .. .. . | 112                | 202           | 122           | 131              | 1              |
| Coffee beans .. .. .                 | 10,208             | 14,320        | 15,531        | 20,182           | 20,572         |
| Cocoa beans .. .. .                  | 9,545              | 11,794        | 16,060        | 15,549           | 13,643         |
| Tea .. .. .                          | 3                  | 42            | 297           | 645              | 1,094          |
| Copra oil cake and pellets .. .. .   | 659                | 530           | 589           | 607              | 893            |
| Crocodile skins .. .. .              | 737                | 509           | 473           | 452              | 264            |
| Peanuts (groundnuts) .. .. .         | 526                | 430           | 460           | 550              | 518            |
| Copra .. .. .                        | 9,994              | 13,943        | 14,804        | 13,340           | 14,207         |
| Rubber, raw .. .. .                  | 2,459              | 1,942         | 2,262         | 2,778            | 2,286          |
| Rubber, scrap .. .. .                | 22                 | 14            | 14            | 20               | 11             |
| Timber, logs .. .. .                 | 1,372              | 1,715         | 1,177         | 2,570            | 5,300          |
| Timber, sawn—                        |                    |               |               |                  |                |
| Conifer .. .. .                      | 785                | 715           | 870           | 1,024            | 835            |
| Non-conifer .. .. .                  | 107                | 232           | 249           | 186              | 235            |
| Shell .. .. .                        | 102                | 85            | 53            | 138              | 169            |
| Pyrethrum extract .. .. .            | 390                | 417           | 313           | 332              | 286            |
| Copra (coconut oil) .. .. .          | 5,181              | 6,875         | 5,772         | 5,801            | 7,805          |
| Battery veneer .. .. .               | 43                 | 45            | 31            | 34               | 18             |
| Veneer sheets .. .. .                | 84                 | 120           | 221           | 140              | 245            |
| Plywood .. .. .                      | 2,040              | 2,264         | 2,252         | 2,529            | 2,505          |
| Pearls, gems .. .. .                 | 5                  | 147           | 469           | 174              | 188            |
| Gold bullion .. .. .                 | 914                | 825           | 807           | 798              | 696            |
| Other .. .. .                        | 333                | 876           | 737           | 1,350            | 2,181          |
| <b>Total .. .. .</b>                 | <b>45,679</b>      | <b>59,059</b> | <b>64,890</b> | <b>71,443</b>    | <b>77,447</b>  |
| <b>Re-exports .. .. .</b>            | <b>7,541</b>       | <b>11,191</b> | <b>10,354</b> | <b>(a)22,117</b> | <b>24,485</b>  |
| <b>Total .. .. .</b>                 | <b>53,220</b>      | <b>70,250</b> | <b>75,244</b> | <b>93,560</b>    | <b>101,932</b> |

(a) Includes floating oil rig valued at \$8,000,000.

(b) Not available separately: included with other produce.

Note: Figures for year ended 30 June 1972 are not yet available.

APPENDIX VII—continued

6. QUANTITIES OF EXPORTS BY MAJOR COMMODITIES FOR YEARS ENDED 30 JUNE 1967 TO 1971

| Commodity                     | Unit of quantity               | 1967    | 1968    | 1969    | 1970    | 1971p   |
|-------------------------------|--------------------------------|---------|---------|---------|---------|---------|
| Coconut and coconut products— |                                |         |         |         |         |         |
| Whole coconut .. ..           | tons                           | 250     | 115     | 199     | 105     | 136     |
| Desiccated coconut .. ..      | tons                           | ..      | ..      | 2,541   | 3,603   | 3,613   |
| Copra .. ..                   | tons                           | 74,100  | 75,500  | 93,742  | 84,265  | 90,568  |
| Copra (coconut oil) .. ..     | tons                           | 23,181  | 24,097  | 20,563  | 21,327  | 26,896  |
| Copra oil pellets(a) .. ..    | tons                           | 13,150  | 10,450  | 11,250  | 11,000  | 15,750  |
| Total .. ..                   | tons                           | 110,681 | 110,162 | 128,295 | 120,300 | 136,963 |
| Coffee beans .. ..            | tons                           | 12,911  | 18,267  | 19,871  | 25,376  | 23,556  |
| Cocoa beans .. ..             | tons                           | 21,592  | 24,000  | 27,293  | 23,325  | 27,387  |
| Tea .. ..                     | tons                           | 4       | 38      | 284     | 679     | 1,151   |
| Peanuts .. ..                 | tons                           | 1,644   | 1,376   | 1,513   | 1,648   | 1,690   |
| Crude rubber .. ..            | tons                           | 5,690   | 5,634   | 5,756   | 6,230   | 6,237   |
| Forest and timber products—   |                                |         |         |         |         |         |
| Logs .. ..                    | '000 super ft (b)              | 40,023  | 46,991  | 33,496  | 65,619  | 140,727 |
| Sawn timber .. ..             | '000 super ft (c)              | 5,143   | 6,084   | 6,987   | 7,173   | 6,172   |
| Plywood .. ..                 | '000 sq ft x $\frac{3}{16}$ in | 21,431  | 25,043  | 24,484  | 26,719  | 26,406  |
| Veneer .. ..                  | '000 sq ft x $\frac{1}{16}$ in | 8,831   | 14,779  | 18,750  | 13,394  | 20,200  |

(a) Includes copra refuse, copra oil cake and meal. (b) Hoppers. (c) True volume.

Note: Figures for year ended 30 June 1972 are not yet available.

7. VALUE(a) OF IMPORTS BY IMPORTING PORT FOR YEARS ENDED 30 JUNE 1967 TO 1971  
(\$'000 f.o.b. port of shipment)

| Port of shipment                | Year ended 30 June |                   |                |                |                |
|---------------------------------|--------------------|-------------------|----------------|----------------|----------------|
|                                 | 1967               | 1968              | 1969           | 1970(r)        | 1971(p)        |
| Port Moresby .. .. .            | 47,765             | (b) 58,288        | 53,539         | 60,603         | 65,438         |
| Samarai .. .. .                 | 2,048              | 2,100             | 2,153          | 2,099          | 2,057          |
| <b>Total Papua</b> .. .. .      | <b>49,813</b>      | <b>(b) 60,388</b> | <b>55,692</b>  | <b>62,702</b>  | <b>67,495</b>  |
| Rabaul .. .. .                  | 19,162             | 22,126            | 23,905         | 29,562         | 28,292         |
| Lae .. .. .                     | 34,405             | 39,963            | 44,706         | 59,820         | 65,648         |
| Madang .. .. .                  | 13,867             | 12,708            | 12,075         | 13,619         | 12,158         |
| Kavieng .. .. .                 | 1,331              | 1,306             | 1,664          | 1,680          | 1,884          |
| Lorengau .. .. .                | 338                | 281               | 412            | 551            | 731            |
| Wewak .. .. .                   | 6,381              | 5,056             | 4,940          | 5,900          | 5,754          |
| Bougainville-Kieta .. .. .      | 525                | 1,682             | 4,826          | 36,808         | 69,602         |
| <b>Total New Guinea</b> .. .. . | <b>76,009</b>      | <b>83,122</b>     | <b>92,528</b>  | <b>147,946</b> | <b>184,069</b> |
| <b>Total Imports</b> .. .. .    | <b>125,822</b>     | <b>143,510</b>    | <b>148,220</b> | <b>210,648</b> | <b>251,564</b> |

(a) Excluding value of outside packages. (b) Includes floating oil rig valued at \$8 million.

Notes: (1) Records are no longer maintained which enabled the preparation of the information which appeared in Tables 8, 9 and 10 of this Appendix in Reports previous to 1970-1971.

(2) Small discrepancies between totals and sums of components in tables are due to rounding.

(3) Figures for year ended 30 June 1972 are not yet available.

8. VALUE OF EXPORTS BY PORT OF SHIPMENT FOR YEARS ENDED 30 JUNE 1967 TO 1971  
(\$'000 f.o.b. port of shipment)

| Port of shipment                | Year ended 30 June |               |               |                  |                |
|---------------------------------|--------------------|---------------|---------------|------------------|----------------|
|                                 | 1967               | 1968          | 1969          | 1970(r)          | 1971           |
| Port Moresby .. .. .            | 7,353              | 9,694         | 9,444         | (a)20,293        | 13,756         |
| Samarai .. .. .                 | 1,485              | 1,652         | 1,504         | 1,460            | 1,438          |
| <b>Total Papua</b> .. .. .      | <b>8,838</b>       | <b>11,346</b> | <b>10,948</b> | <b>21,753</b>    | <b>15,194</b>  |
| Rabaul .. .. .                  | 18,677             | 24,401        | 28,813        | 28,603           | 31,869         |
| Lae .. .. .                     | 14,878             | 23,160        | 24,937        | 31,802           | 36,253         |
| Madang .. .. .                  | 7,176              | 7,027         | 6,430         | 6,062            | 6,692          |
| Kavieng .. .. .                 | 2,013              | 2,647         | 2,670         | 3,204            | 3,970          |
| Lorengau .. .. .                | 292                | 407           | 405           | 425              | 352            |
| Wewak .. .. .                   | 296                | 402           | 514           | 766              | 855            |
| Bougainville-Kieta .. .. .      | 1,050              | 860           | 527           | 945              | 6,747          |
| <b>Total New Guinea</b> .. .. . | <b>44,382</b>      | <b>58,904</b> | <b>64,296</b> | <b>71,807</b>    | <b>86,738</b>  |
| <b>Total Exports</b> .. .. .    | <b>53,220</b>      | <b>70,250</b> | <b>75,244</b> | <b>(a)93,560</b> | <b>101,932</b> |

(a) Includes oil rig valued at \$8 million.

Note: Figures for year ended 30 June 1972 are not yet available.

APPENDIX VII—continued

9. REGISTERED LOCAL AND FOREIGN COMPANIES: NUMBERS REGISTERED AT AND DURING YEARS ENDED 30 JUNE 1971 AND 1972, AND CHANGES DURING 1971-72 BY CATEGORY OF INDUSTRY

| Category                                       | Local                      |                           |                              |                            | Foreign                    |                           |                              |                            |
|--|----------------------------|---------------------------|------------------------------|----------------------------|----------------------------|---------------------------|------------------------------|----------------------------|
|  | Registered at 30 June 1971 | Registered during 1971-72 | De-registered during 1971-72 | Registered at 30 June 1972 | Registered at 30 June 1971 | Registered during 1971-72 | De-registered during 1971-72 | Registered at 30 June 1972 |
| Commercial—                                    |                            |                           |                              |                            |                            |                           |                              |                            |
| Building and construction ..                   | ..                         | 12                        | 1                            | ..                         | ..                         | 9                         | 1                            | ..                         |
| Transport and storage ..                       | ..                         | 22                        | 4                            | ..                         | ..                         | 2                         | ..                           | ..                         |
| Commerce ..                                    | 1,701                      | 79                        | 2                            | 1,825                      | 276                        | 14                        | 1                            | 303                        |
| Community and business services ..             | ..                         | 8                         | ..                           | ..                         | ..                         | 3                         | ..                           | ..                         |
| Amusements, hotels, accommodation and cafes .. | ..                         | 14                        | 4                            | ..                         | ..                         | 1                         | ..                           | ..                         |
| Industrial ..                                  | 186                        | 46                        | 7                            | 225                        | 32                         | 16                        | 1                            | 47                         |
| Agricultural ..                                | 285                        | 25                        | 4                            | 306                        | 13                         | 4                         | ..                           | 17                         |
| Mining ..                                      | 32                         | 4                         | ..                           | 36                         | 105                        | 11                        | ..                           | 116                        |
| Financial ..                                   | 136                        | 155                       | 1                            | 290                        | 117                        | 24                        | 2                            | 139                        |
| Not for gain ..                                | 36                         | ..                        | ..                           | 36                         | 29                         | ..                        | ..                           | 29                         |
| Total ..                                       | 2,376                      | 365                       | 23                           | 2,718                      | 572                        | 84                        | 5                            | 651                        |



## 10. ANNUAL SUMMARY OF QUARTERLY STATISTICAL RETURNS FOR REGULAR CLIENTS OF BUSINESS EXTENSION SERVICES BY DISTRICT FOR YEAR ENDED 31 MARCH 1972

| District                 | Total number of clients | Number of times assistance given |         | Capital at start B.E.S. assistance |         | Capital accumulated under B.E.S. assistance |         | Earnings and capital disbursed under B.E.S. |         | Turnover  |         | Total loans and hire purchase |
|--------------------------|-------------------------|----------------------------------|---------|------------------------------------|---------|---|---------|---|---------|-----------|---------|-------------------------------|
|                          |                         | Total                            | Average | Total                              | Average | Total                                       | Average | Total                                       | Average | Total     | Average |                               |
|                          |                         |                                  |         | \$                                 | \$      | \$  | \$      | \$  | \$      | \$        | \$      |                               |
| Central .. ..            | 75                      | 2,372                            | 31      | 134,630                            | 1,795   | 97,348                                      | 1,298   | 9,283                                       | 110     | 1,259,046 | 16,787  | 13,230                        |
| East New Britain .. ..   | 67                      | 762                              | 11      | 88,148                             | 1,320   | 3,970                                       | 59      | ..  | ..      | 464,100   | 8,420   | 11,267                        |
| Madang .. ..             | 24                      | 941                              | 39      | 26,111                             | 1,090   | 41,778                                      | 1,740   | 12,166                                      | 505     | 207,550   | 8,670   | 24,568                        |
| Morobe .. ..             | 53                      | 1,041                            | 20      | 54,664                             | 1,030   | 14,700                                      | 278     | ..  | ..      | 693,000   | 13,150  | 56,990                        |
| Eastern Highlands .. ..  | 29                      | 1,117                            | 46      | 45,075                             | 1,578   | 37,984                                      | 1,305   | 960   | 33      | 537,804   | 18,580  | 57,100                        |
| Milne Bay .. ..          | 21                      | 89                               | 4       | 38,283                             | 1,820   | 2,738                                       | 129     | 337   | 16      | 82,628    | 3,930   | ..                            |
| Western Highlands .. ..  | 50                      | 1,182                            | 23      | 81,505                             | 1,630   | 5,138                                       | 102     | 2,000                                       | 40      | 456,319   | 9,110   | 80,887                        |
| New Ireland .. ..        | 26                      | 412                              | 16      | 23,389                             | 900     | 9,408                                       | 361     | 108   | 4       | 81,750    | 3,144   | 17,687                        |
| Chimbu .. ..             | 10                      | 369                              | 37      | 14,439                             | 1,443   | 3,454                                       | 345     | ..  | ..      | 76,700    | 7,670   | 3,669                         |
| Bougainville .. ..       | 74                      | 725                              | 10      | 28,930                             | 392     | 143,850                                     | 1,930   | ..  | ..      | 451,400   | 6,100   | 1,320                         |
| East Sepik .. ..         | 33                      | 1,553                            | 47      | 28,428                             | 862     | 23,750                                      | 720     | ..  | ..      | 223,750   | 6,780   | 25,920                        |
| Southern Highlands .. .. | 17                      | 292                              | 17      | 21,901                             | 1,290   | 20,923                                      | 1,230   | 1,971                                       | 116     | 242,000   | 14,200  | 12,020                        |
| Gulf .. ..               | 20                      | 306                              | 15      | 21,447                             | 622     | 1,712                                       | 85      | 827   | 41      | 134,746   | 6,737   | 30,892                        |
| Total .. ..              | 499                     | 11,161                           | 22      | 597,950                            | 1,198   | 406,753                                     | 815     | 26,652                                      | 53      | 4,910,793 | 9,841   | 335,550                       |

## 11. ANNUAL SUMMARY OF QUARTERLY STATISTICAL RETURNS FOR TOTAL REGULAR BUSINESS EXTENSION CLIENTS BY TYPE OF ACTIVITY FOR YEAR ENDED 31 MARCH 1972

| Activity                   | Total number of clients | Number of times assistance given |         | Capital at start B.E.S. assistance |         | Capital accumulated under B.E.S. assistance |         | Earnings and capital disbursed under B.E.S. |         | Turnover  |         | Total loans and hire purchase |
|----------------------------|-------------------------|----------------------------------|---------|------------------------------------|---------|---|---------|---|---------|-----------|---------|-------------------------------|
|                            |                         | Total                            | Average | Total                              | Average | Total                                       | Average | Total                                       | Average | Total     | Average |                               |
|                            |                         |                                  |         | \$                                 | \$      | \$  | \$      | \$  | \$      | \$        | \$      |                               |
| Retail and wholesale .. .. | 230                     | 3,637                            | 16      | 208,477                            | 906     | 126,057                                     | 548     | 12,620                                      | 55      | 2,111,380 | 9,180   | 62,757                        |
| Road transport .. ..       | 63                      | 1,634                            | 26      | 152,483                            | 2,420   | 97,392                                      | 1,546   | 4,774                                       | 76      | 678,404   | 10,768  | 48,980                        |
| Sea transport .. ..        | 13                      | 109                              | 9       | 16,852                             | 1,296   | 10,550                                      | 812     | 2,407                                       | 185     | 42,784    | 3,291   | 15,937                        |
| Tradesmen .. ..            | 98                      | 3,895                            | 40      | 63,669                             | 650     | 60,605                                      | 4,662   | 6,251                                       | 64      | 1,396,226 | 14,247  | 141,446                       |
| Others .. ..               | 95                      | 1,886                            | 20      | 156,469                            | 1,647   | 112,149                                     | 1,181   | 600   | 6       | 681,999   | 7,179   | 66,430                        |
| Total .. ..                | 499                     | 11,161                           | 22      | 597,950                            | 1,198   | 406,753                                     | 815     | 26,652                                      | 53      | 4,910,793 | 9,841   | 335,550                       |

APPENDIX VII—continued

12. ANNUAL SUMMARY OF CONTRACTS GIVEN TO PAPUA NEW GUINEAN CONTRACTORS ASSISTED BY THE BUSINESS EXTENSION SERVICES BY NUMBER, AND VALUE BY DISTRICT DURING YEAR ENDED 30 JUNE 1972

| District                       | Administration |                | Statistical Bodies |                | Other      |                | Total      |                |
|--------------------------------|----------------|----------------|--------------------|----------------|------------|----------------|------------|----------------|
|                                | Number         | Dollars        | Number             | Dollars        | Number     | Dollars        | Number     | Dollars        |
| Central .. .. .                | 86             | 143,720        | 40                 | 194,672        | 116        | 88,744         | 242        | 427,136        |
| East New Britain/Manus .. .. . | 2              | 49,450         | ..                 | ..             | 8          | 15,411         | 10         | 64,861         |
| Madang .. .. .                 | 3              | 50,200         | 4                  | 22,906         | 2          | 8,932          | 9          | 82,038         |
| Morobe .. .. .                 | 45             | 79,923         | 7                  | 35,290         | 9          | 12,979         | 61         | 128,192        |
| Eastern Highlands .. .. .      | 5              | 47,685         | ..                 | ..             | 1          | 1,250          | 6          | 48,935         |
| Milne Bay .. .. .              | ..             | ..             | ..                 | ..             | 1          | 755            | 1          | 755            |
| Northern .. .. .               | ..             | ..             | ..                 | ..             | ..         | ..             | ..         | ..             |
| Western Highlands .. .. .      | 3              | 33,485         | ..                 | ..             | 1          | 200            | 4          | 33,685         |
| New Ireland .. .. .            | ..             | ..             | ..                 | ..             | ..         | ..             | ..         | ..             |
| Chimbu .. .. .                 | 4              | 2,150          | ..                 | ..             | 1          | 500            | 5          | 2,650          |
| Bougainville .. .. .           | ..             | ..             | ..                 | ..             | ..         | ..             | ..         | ..             |
| East Sepik .. .. .             | 15             | 21,532         | 5                  | 9,805          | 3          | 2,296          | 23         | 33,633         |
| Southern Highlands .. .. .     | ..             | ..             | ..                 | ..             | ..         | ..             | ..         | ..             |
| Gulf/Western .. .. .           | 14             | 18,515         | ..                 | ..             | 3          | 550            | 17         | 19,065         |
| West New Britain .. .. .       | 2              | 590            | ..                 | ..             | 1          | 740            | 3          | 1,330          |
| West Sepik .. .. .             | ..             | ..             | ..                 | ..             | ..         | ..             | ..         | ..             |
| <b>Total .. .. .</b>           | <b>179</b>     | <b>447,250</b> | <b>56</b>          | <b>262,673</b> | <b>146</b> | <b>132,357</b> | <b>381</b> | <b>842,280</b> |

13. ANNUAL SUMMARY OF MONTHLY STATISTICS: CLIENTS' CALLS BY DISTRICT DURING YEARS ENDED 30 JUNE 1971 AND 1972

| District                             | 1970-71        |               |               | 1971-72        |               |               |
|--------------------------------------|----------------|---------------|---------------|----------------|---------------|---------------|
|                                      | Client's calls |               |               | Client's Calls |               |               |
|                                      | First          | Repeat        | Total         | First          | Repeat        | Total         |
| Central .. .. .                      | 780            | 2,022         | 2,802         | 427            | 3,071         | 3,498         |
| East New Britain/Manus .. .. .       | 214            | 1,195         | 1,409         | 178            | 813           | 991           |
| Madang .. .. .                       | 338            | 1,324         | 1,662         | 238            | 1,189         | 1,427         |
| Morobe .. .. .                       | 391            | 863           | 1,254         | 295            | 1,034         | 1,329         |
| Eastern Highlands .. .. .            | 223            | 1,324         | 1,547         | 228            | 1,262         | 1,490         |
| Milne Bay .. .. .                    | 20             | 15            | 35            | 121            | 215           | 336           |
| Northern .. .. .                     | ..             | ..            | ..            | ..             | ..            | ..            |
| Western Highlands .. .. .            | 697            | 2,160         | 2,857         | 702            | 2,251         | 2,953         |
| New Ireland .. .. .                  | 195            | 588           | 783           | 165            | 443           | 608           |
| Chimbu .. .. .                       | 275            | 478           | 753           | 279            | 676           | 955           |
| Bougainville .. .. .                 | 419            | 649           | 1,068         | 144            | 1,104         | 1,158         |
| East Sepik .. .. .                   | 327            | 1,504         | 1,831         | 503            | 1,956         | 2,549         |
| Southern Highlands .. .. .           | 55             | 72            | 127           | 203            | 441           | 644           |
| Gulf/Western .. .. .                 | ..             | ..            | ..            | 98             | 648           | 746           |
| West New Britain .. .. .             | ..             | ..            | ..            | 9              | 21            | 30            |
| West Sepik .. .. .                   | ..             | ..            | ..            | ..             | ..            | ..            |
| Namatanai (up to Sept. 1970) .. .. . | 15             | 70            | 85            | ..             | ..            | ..            |
| <b>Total .. .. .</b>                 | <b>3,949</b>   | <b>12,264</b> | <b>16,213</b> | <b>3,590</b>   | <b>15,034</b> | <b>18,624</b> |

Note: Figures include calls of both regular and casual clients.

## 14. SUMMARIES OF INTERVIEWS AND CLIENTS OF BUSINESS EXTENSION SERVICE FOR YEARS ENDED 30 JUNE 1968 TO 1972

| Year          | Clients    |             |                            | Interviews per client | Number of B.E.S. offices | Average number of interviews per office | Offices opened during the year |
|---------------|------------|-------------|----------------------------|-----------------------|--------------------------|---|--------------------------------|
|               | First call | Repeat call | Total number of interviews |                       |                          |   |                                |
| 1967-68 .. .. | 2,033      | 1,073       | 3,106                      | 1.53                  | 6                        | 518                                     | Mount Hagen<br>Kavieng         |
| 1968-69 .. .. | 1,750      | 1,204       | 2,954                      | 1.69                  | 7                        | 422                                     | Madang                         |
| 1969-70 .. .. | 1,800      | 4,683       | 6,483                      | 3.60                  | 10                       | 648                                     | Wewak<br>Kieta<br>Kundiawa     |
| 1970-71 .. .. | 3,949      | 12,264      | 16,213                     | 4.11                  | 12                       | 1,351                                   | Mendi<br>Alotau                |
| 1971-72 .. .. | 3,590      | 15,034      | 18,624                     | 5.19                  | 14                       | 1,330                                   | Kerema<br>Kimbe                |

Note: The statistical information above commenced in 1967-68. Offices opened prior to 1967-68 were Port Moresby, 1963; Rabaul, 1964; Lae, 1964; and Goroka, 1966.

Figures for clients include both regular and casual clients.

## APPENDIX VIII

### AGRICULTURE

#### 1. LAND TENURE AT 30 JUNE 1972

| Tenure   | Hectares  | Hectares  | Hectares   |
|--|-----------|-----------|------------|
| Freehold land owned by non-indigenous persons .. .. .                                    | ..        | 216,628   | ..         |
| Freehold land under tenure conversion .. .. .  | ..        | 3,747     | ..         |
| Administration land—   |           |           |            |
| Leases under Land Ordinance .. .. .  | 407,167   | ..        | ..         |
| Native reserves .. .. .  | 38,070    | ..        | ..         |
| Other (including land reserved for public purposes and<br>available for leasing) .. .. . | 1,537,344 | ..        | ..         |
| Total Administration land .. .. .  | ..        | 1,982,581 | ..         |
| Alienated land .. .. .   | ..        | ..        | 2,202,956  |
| Unalienated land .. .. .   | ..        | ..        | 43,966,077 |
| Total area of Papua New Guinea .. .. .   | ..        | ..        | 46,169,033 |

#### 2. LAND HELD UNDER LEASE AT 30 JUNE 1972

| Class of lease                 | Number of leases | Area in hectares |
|--------------------------------|------------------|------------------|
| Agricultural .. .. .           | 6,761            | 256,900          |
| Dairying .. .. .               | 9                | 814              |
| Pastoral .. .. .               | 50               | 81,433           |
| Residence and business .. .. . | 16,193           | 16,287           |
| Special .. .. .                | 2,036            | 40,717           |
| Mission .. .. .                | 2,545            | 10,179           |
| Town sub-division .. .. .      | 17               | 837              |
| Totals .. .. .                 | 27,611           | 407,167          |

## 3. NUMBER AND AREA IN HECTARES OF LEASES GRANTED DURING YEAR ENDED 30 JUNE 1972 BY CLASS OF LEASE AND DISTRICT

| District              | Agricultural |       | Pastoral |      | Business |      | Residence |      | Special purpose |      | Mission |      | Administration purposes |       | Total |        |
|-----------------------|--------------|-------|----------|------|----------|------|-----------|------|-----------------|------|---------|------|-------------------------|-------|-------|--------|
|                       | No.          | Area  | No.      | Area | No.      | Area | No.       | Area | No.             | Area | No.     | Area | No.                     | Area  | No.   | Area   |
| Chimbu .. ..          | 1            | 131   | ..       | ..   | 6        | 3    | 1         | 1    | 1               | 4    | 2       | 8    | 6                       | 25    | 17    | 172    |
| Eastern Highlands ..  | 4            | 600   | ..       | ..   | 11       | 4    | 5         | 1    | 10              | 18   | 4       | 8    | 9                       | 4     | 43    | 635    |
| Western Highlands ..  | 6            | 1,807 | ..       | ..   | 13       | 14   | 5         | 2    | 6               | 13   | 8       | 58   | 14                      | 129   | 52    | 2,023  |
| West New Britain ..   | 3            | 2,464 | ..       | ..   | 9        | 3    | 4         | 2    | 4               | 143  | 7       | 31   | 11                      | 403   | 38    | 3,046  |
| Morobe .. ..          | 4            | 10    | ..       | ..   | 21       | 11   | 10        | 16   | 7               | 257  | 2       | 3    | 9                       | 233   | 53    | 530    |
| East New Britain ..   | 3            | 166   | ..       | ..   | 8        | 7    | 2         | 1    | 1               | 1    | 2       | 1    | 20                      | 32    | 36    | 208    |
| Manus .. ..           | 2            | 126   | ..       | ..   | 2        | 1    | 1         | 1    | 2               | 1    | ..      | ..   | 3                       | 1     | 10    | 130    |
| Madang .. ..          | ..           | ..    | ..       | ..   | 6        | 2    | 6         | 2    | 6               | 21   | 1       | 1    | 8                       | 23    | 27    | 49     |
| East Sepik .. ..      | 2            | 31    | ..       | ..   | 13       | 4    | 3         | 3    | 6               | 3    | 4       | 66   | 6                       | 4     | 34    | 111    |
| Bougainville .. ..    | ..           | ..    | ..       | ..   | 4        | 1    | 1         | 1    | 3               | 2    | ..      | ..   | 6                       | 3     | 14    | 7      |
| New Ireland .. ..     | 2            | 103   | ..       | ..   | 3        | 1    | 5         | 2    | 3               | 7    | ..      | ..   | 6                       | 3     | 19    | 116    |
| West Sepik .. ..      | ..           | ..    | ..       | ..   | 4        | 8    | ..        | ..   | ..              | ..   | 1       | 1    | 4                       | 3     | 9     | 12     |
| Southern Highlands .. | 1            | 400   | ..       | ..   | 7        | 1    | 3         | 1    | 5               | 9    | 6       | 10   | 16                      | 69    | 38    | 490    |
| Western .. ..         | ..           | ..    | ..       | ..   | 4        | 1    | 4         | 5    | 2               | 1    | 1       | 1    | 3                       | 20    | 14    | 28     |
| Gulf .. ..            | ..           | ..    | ..       | ..   | 5        | 12   | 1         | 1    | 4               | 4    | 3       | 1    | 2                       | 4     | 15    | 22     |
| Northern .. ..        | 12           | 2,072 | ..       | ..   | 6        | 7    | 1         | 1    | 2               | 1    | 3       | 29   | 1                       | 193   | 25    | 2,303  |
| Central .. ..         | 3            | 105   | ..       | ..   | 20       | 47   | 24        | 12   | 22              | 217  | 9       | 24   | 22                      | 3,543 | 100   | 3,948  |
| Milne Bay .. ..       | 1            | 380   | ..       | ..   | 7        | 2    | 2         | 1    | 6               | 24   | 1       | 9    | 1                       | 1     | 18    | 417    |
| Total .. ..           | 44           | 8,395 | ..       | ..   | 149      | 129  | 78        | 53   | 90              | 726  | 54      | 251  | 147                     | 4,693 | 562   | 14,247 |

## 4. NUMBER AND AREA IN HECTARES OF LEASES GRANTED DURING YEAR ENDED 30 JUNE 1972 BY CLASS OF LEASE AND CLASS OF LESSEE

| Class of lease                  | Papua New Guineans |              | Expatriate persons |              | Required for Administration purposes |              | Missions  |              | Housing Commission |           | Town sub-division |           | Total      |               |
|---------------------------------|--------------------|--------------|--------------------|--------------|--------------------------------------|--------------|-----------|--------------|--------------------|-----------|-------------------|-----------|------------|---------------|
|                                 | No.                | Area         | No.                | Area         | No.                                  | Area         | No.       | Area         | No.                | Area      | No.               | Area      | No.        | Area          |
| Agricultural .. .. .            | 34                 | 4,102        | 14                 | 3,092        | ..                                   | ..           | ..        | ..           | ..                 | ..        | ..                | ..        | 48         | 7,194         |
| Pastoral .. .. .                | ..                 | ..           | ..                 | ..           | ..                                   | ..           | ..        | ..           | ..                 | ..        | ..                | ..        | ..         | ..            |
| Business and residence .. .. .  | 45                 | 28           | 192                | 236          | ..                                   | ..           | ..        | ..           | ..                 | ..        | ..                | ..        | 237        | 264           |
| Special purposes .. .. .        | 45                 | 117          | 43                 | 636          | ..                                   | ..           | ..        | ..           | ..                 | ..        | ..                | ..        | 88         | 753           |
| Mission .. .. .                 | ..                 | ..           | ..                 | ..           | ..                                   | ..           | 60        | 3,728        | ..                 | ..        | ..                | ..        | 60         | 3,628         |
| Administration purposes .. .. . | ..                 | ..           | ..                 | ..           | 172                                  | 1,359        | ..        | ..           | ..                 | ..        | ..                | ..        | 172        | 1,359         |
| Housing Commission .. .. .      | ..                 | ..           | ..                 | ..           | ..                                   | ..           | ..        | ..           | 21                 | 21        | ..                | ..        | 21         | 21            |
| Electricity Commission .. .. .  | ..                 | ..           | ..                 | ..           | 8                                    | 4            | ..        | ..           | ..                 | ..        | ..                | ..        | 8          | 4             |
| Town sub-division .. .. .       | ..                 | ..           | ..                 | ..           | ..                                   | ..           | ..        | ..           | ..                 | ..        | ..                | ..        | ..         | ..            |
| <b>Total .. .. .</b>            | <b>124</b>         | <b>4,247</b> | <b>249</b>         | <b>3,964</b> | <b>180</b>                           | <b>1,363</b> | <b>60</b> | <b>3,628</b> | <b>21</b>          | <b>21</b> | <b>..</b>         | <b>..</b> | <b>634</b> | <b>13,223</b> |

## 5. LAND DEALINGS FOR YEAR ENDED 30 JUNE 1972

| Purpose      |    |    |    |    | Dealings | Area     | Amount in \$A |
|--------------|----|----|----|----|----------|----------|---------------|
|              |    |    |    |    |          | hectares |               |
| Agriculture  | .. | .. | .. | .. | 28       | 2,420    | 71,700        |
| Pastoral     | .. | .. | .. | .. | 20       | 20,803   | 137,989       |
| Urban        | .. | .. | .. | .. | 40       | 797      | 476,431       |
| Others       | .. | .. | .. | .. | 540      | 15,115   | 667,452       |
| <b>Total</b> | .. | .. | .. | .. | 540      | 39,135   | 1,353,572     |

Included in these figures are purchases of alienated land which amounted to: Leasehold—2,607 hectares and 210 hectares\* of Freehold.

## 6. RURAL LEASES MADE AVAILABLE IN 1971-72

| Type of block                      |    |    |    |    | Number | Area     |
|------------------------------------|----|----|----|----|--------|----------|
|                                    |    |    |    |    |        | hectares |
| Small holder (below 50 h.a.)       | .. | .. | .. | .. | 646    | 5,687    |
| Small holder extensions            | .. | .. | .. | .. | 2      | 23       |
| Medium holder blocks (50-150 h.a.) | .. | .. | .. | .. | 35     | 3,315    |
| Large holder blocks                | .. | .. | .. | .. | 6      | 5,935    |
| <b>Total</b>                       | .. | .. | .. | .. | 689    | 14,960   |

# APPENDIX IX

## LIVESTOCK

### 1. CATTLE NUMBERS BY DISTRICT AND TYPE OF OWNERS FOR YEARS ENDED 30 JUNE 1968 TO 1972

*Papua*

| District                 | Owner                   | 1967-68 | 1968-69 | 1969-70 | 1970-71 | 1971-72 |
|--------------------------|-------------------------|---------|---------|---------|---------|---------|
| Central .. ..            | Government .. ..        | 1,931   | 2,196   | 1,958   | 2,220   | 2,430   |
|                          | Papua New Guinean .. .. | 171     | 210     | 394     | 727     | 1,190   |
|                          | Expatriate .. ..        | 5,236   | 5,926   | 7,232   | 7,560   | 8,950   |
|                          | Total .. ..             | 7,428   | 8,332   | 9,584   | 10,507  | 12,570  |
| Northern .. ..           | Government .. ..        | 68      | 78      | 87      | 164     | 168     |
|                          | Papua New Guinean .. .. | 44      | 113     | 353     | 751     | 1,560   |
|                          | Expatriate .. ..        | 2,160   | 2,211   | 2,252   | 2,326   | 2,520   |
|                          | Total .. ..             | 2,272   | 2,402   | 2,692   | 3,241   | 4,248   |
| Milne Bay .. ..          | Government .. ..        | 49      | 91      | 144     | 91      | 64      |
|                          | Papua New Guinean .. .. | 56      | 56      | 81      | 129     | 350     |
|                          | Expatriate .. ..        | 792     | 942     | 1,084   | 970     | 1,340   |
|                          | Total .. ..             | 897     | 1,089   | 1,309   | 1,190   | 1,754   |
| Gulf .. ..               | Government .. ..        | ..      | 12      | 12      | 18      | 28      |
|                          | Papua New Guinean .. .. | ..      | 8       | ..      | ..      | 6       |
|                          | Expatriate .. ..        | 181     | 181     | 213     | 256     | 265     |
|                          | Total .. ..             | 181     | 201     | 225     | 274     | 299     |
| Western .. ..            | Government .. ..        | ..      | ..      | ..      | 50      | 20      |
|                          | Papua New Guinean .. .. | ..      | ..      | ..      | ..      | 36      |
|                          | Expatriate .. ..        | 235     | 235     | 250     | 289     | 322     |
|                          | Total .. ..             | 235     | 235     | 250     | 339     | 378     |
| Southern Highlands .. .. | Government .. ..        | 37      | 67      | 150     | 48      | 52      |
|                          | Papua New Guinean .. .. | 89      | 237     | 460     | 895     | 1,100   |
|                          | Expatriate .. ..        | 155     | 211     | 330     | 295     | 310     |
|                          | Total .. ..             | 277     | 515     | 940     | 1,238   | 1,462   |
| Total .. ..              | Government .. ..        | 2,085   | 2,444   | 2,351   | 2,591   | 2,762   |
|                          | Papua New Guinean .. .. | 360     | 624     | 1,288   | 2,502   | 4,242   |
|                          | Expatriate .. ..        | 8,845   | 9,706   | 11,361  | 11,696  | 13,707  |
|                          | Total .. ..             | 11,290  | 12,774  | 15,000  | 16,789  | 20,711  |



## APPENDIX IX—continued

## 1. CATTLE NUMBERS BY DISTRICT AND TYPE OF OWNERS FOR YEARS ENDED 30 JUNE 1968 TO 1972—continued

## New Guinea

| District                | Owner                   | 1967-68 | 1968-69 | 1969-70 | 1970-71 | 1971-72 |
|-------------------------|-------------------------|---------|---------|---------|---------|---------|
| East Sepik .. ..        | Government .. ..        | 708     | 1,122   | 1,173   | 1,337   | 1,470   |
|                         | Papua New Guinean .. .. | 500     | 777     | 1,359   | 1,767   | 2,346   |
|                         | Expatriate .. ..        | 1,332   | 1,505   | 1,685   | 1,902   | 2,114   |
|                         | Total .. ..             | 2,540   | 3,404   | 4,217   | 5,006   | 5,930   |
| West Sepik .. ..        | Government .. ..        | ..      | 1       | ..      | 3       | 3       |
|                         | Papua New Guinean .. .. | 158     | 190     | 250     | 229     | 308     |
|                         | Expatriate .. ..        | 312     | 292     | 350     | 341     | 352     |
|                         | Total .. ..             | 470     | 483     | 600     | 573     | 663     |
| Western Highlands .. .. | Government .. ..        | 3,464   | 4,022   | 4,200   | 4,576   | 5,600   |
|                         | Papua New Guinean .. .. | 618     | 656     | 900     | 965     | 1,200   |
|                         | Expatriate .. ..        | 1,578   | 1,767   | 2,000   | 2,805   | 3,000   |
|                         | Total .. ..             | 5,660   | 6,445   | 7,100   | 8,346   | 9,800   |
| Eastern Highlands .. .. | Government .. ..        | 743     | 862     | 697     | 1,450   | 956     |
|                         | Papua New Guinean .. .. | 800     | 1,095   | 1,692   | 2,376   | 2,992   |
|                         | Expatriate .. ..        | 2,585   | 2,507   | 3,299   | 3,329   | 3,168   |
|                         | Total .. ..             | 4,128   | 4,464   | 5,688   | 7,155   | 7,116   |
| Chimbu .. ..            | Government .. ..        | ..      | 4       | 5       | 10      | 8       |
|                         | Papua New Guinean .. .. | 333     | 364     | 548     | 579     | 667     |
|                         | Expatriate .. ..        | 400     | 366     | 387     | 398     | 220     |
|                         | Total .. ..             | 733     | 734     | 940     | 987     | 895     |
| Madang .. ..            | Government .. ..        | 88      | 72      | 63      | 58      | 52      |
|                         | Papua New Guinean .. .. | 195     | 208     | 260     | 556     | 837     |
|                         | Expatriate .. ..        | 4,107   | 4,612   | 4,341   | 6,961   | 10,471  |
|                         | Total .. ..             | 4,390   | 4,892   | 4,664   | 7,575   | 11,360  |
| Morobe .. ..            | Government .. ..        | 1,267   | 1,405   | 1,603   | 1,663   | 1,843   |
|                         | Papua New Guinean .. .. | 1,421   | 1,882   | 2,200   | 2,680   | 6,215   |
|                         | Expatriate .. ..        | 25,243  | 29,036  | 33,108  | 35,487  | 34,651  |
|                         | Total .. ..             | 27,941  | 32,323  | 36,911  | 39,830  | 42,709  |
| West New Britain .. ..  | Government .. ..        | ..      | ..      | ..      | ..      | 13      |
|                         | Papua New Guinean .. .. | 12      | ..      | 320     | ..      | ..      |
|                         | Expatriate .. ..        | 100     | 137     | ..      | 113     | 86      |
|                         | Total .. ..             | 112     | 137     | 320     | 113     | 99      |
| East New Britain .. ..  | Government .. ..        | 195     | 215     | 260     | 315     | 306     |
|                         | Papua New Guinean .. .. | ..      | ..      | ..      | ..      | ..      |
|                         | Expatriate .. ..        | 685     | 1,044   | 773     | 740     | 932     |
|                         | Total .. ..             | 880     | 1,259   | 1,033   | 1,055   | 1,238   |
| Bougairville .. ..      | Government .. ..        | 40      | 52      | 38      | 61      | 105     |
|                         | Papua New Guinean .. .. | 15      | 47      | 99      | 148     | 315     |
|                         | Expatriate .. ..        | 301     | 334     | 377     | 643     | 567     |
|                         | Total .. ..             | 356     | 433     | 514     | 852     | 987     |

APPENDIX IX—continued

1. CATTLE NUMBERS BY DISTRICT AND TYPE OF OWNERS FOR YEARS ENDED 30 JUNE 1968 TO 1972—continued  
New Guinea—continued

| District       | Owner                   | 1967-68 | 1968-69 | 1969-70 | 1970-71 | 1971-72 |
|----------------|-------------------------|---------|---------|---------|---------|---------|
| New Ireland .. | Government .. ..        | 5       | ..      | 5       | 7       | 21      |
|                | Papua New Guinean .. .. | ..      | ..      | ..      | ..      | 25      |
|                | Expatriate .. ..        | 566     | 805     | 1,286   | 949     | 963     |
|                | Total .. ..             | 571     | 805     | 1,291   | 956     | 1,009   |
| Manus .. ..    | Government .. ..        | 36      | 40      | 40      | 38      | 24      |
|                | Papua New Guinean .. .. | 13      | 17      | 20      | 25      | 29      |
|                | Expatriate .. ..        | 194     | 35      | 210     | 34      | 46      |
|                | Total .. ..             | 243     | 102     | 270     | 97      | 99      |
| Total .. ..    | Government .. ..        | 6,546   | 7,795   | 8,084   | 9,518   | 10,401  |
|                | Papua New Guinean .. .. | 4,065   | 5,246   | 7,648   | 9,325   | 14,934  |
|                | Expatriate .. ..        | 37,413  | 42,440  | 47,816  | 53,702  | 56,570  |
|                | Total .. ..             | 48,024  | 55,481  | 63,548  | 72,545  | 81,905  |

## APPENDIX X

### FISHERIES

#### 1. QUANTITY AND VALUE OF FISH, CRUSTACEANS AND SHELL EXPORTED DURING YEARS ENDED 30 JUNE 1967 TO 1971

| Item                                    | 1967   |          | 1968    |          | 1969    |          | 1970    |          | 1971      |          |
|---|--------|----------|---------|----------|---------|----------|---------|----------|-----------|----------|
|   | Value  | Quantity | Value   | Quantity | Value   | Quantity | Value   | Quantity | Value     | Quantity |
|   | \$     | cwt      | \$      | cwt      | \$      | cwt      | \$      | cwt      | \$        | cwt      |
| Beche-de-mer .. .. .                    | 15,565 | 206      | 15,274  | 220      | 16,497  | 244      | 13,746  | 156      | 11,955    | 128      |
| Barramundi and other fresh fish .. .. . | 26,815 | 713      | 39,011  | 1,021    | 60,371  | 1,592    | 228,770 | 23,484   | 87,852    | 2,012    |
| Tuna .. .. .                            |        |          |         |          |         |          |         |          | 1,316,706 | 176,801  |
| Crayfish .. .. .                        | 33,363 | 368      | 977,627 | 7,932    | 268,183 | 2,307    | 647,877 | 5,138    | 57,439    | 374      |
| Prawns .. .. .                          |        |          |         |          |         |          |         |          | 817,885   | 6,873    |
| Green snail shell .. .. .               | 8,026  | 391      | 12,947  | 479      | 6,079   | 239      | 10,288  | 330      | 10,675    | 466      |
| Mother-of-Pearl shell .. .. .           | 18,114 | 624      | 12,648  | 408      | 10,463  | 443      | 22,457  | 1,000    | 47,410    | 1,381    |
| Trochus shell .. .. .                   | 74,327 | 8,226    | 54,569  | 6,727    | 34,381  | 5,093    | 105,760 | 8,678    | 11,261    | 10,194   |
| Turtle shell .. .. .                    | 1,904  | n.a.     | 4,945   | 531      | 1,670   | 76       | ..      | ..       | 115       | 4        |

# APPENDIX XI

## FORESTS

### 1. CLASSIFICATION OF FOREST AREAS AT 30 JUNE 1972

| Particulars  | Area       | Remarks  |
|--|------------|--|
|  | hectares   |  |
| 1. Dedicated Forest .. .. .                                | 44,106     | 1. This area includes 11,506 hectares in the Bulolo-Wau Valley.  |
| 2. Other Government Land—                                  |            |  |
| (a) Acquired for forestry purposes ..                      | 45,495     | 2. (a) This area may vary from year to year as areas are dedicated and others are acquired.                        |
| (b) Timber rights purchased ..                             | 1,969,355  | (b) This is the total area under current timber rights and will vary as rights expire and new rights are acquired. |
| (c) Land under permits and licences not elsewhere included | 92,000     | (c) Includes permits and licences granted over land to be cleared for agricultural development.                    |
| 3. Estimated forest resource .. .. .                       | 36,500,000 | 3. Total estimated forest area.  |

### 2. SILVICULTURE OPERATIONS FOR YEARS ENDED 30 JUNE 1968 TO 1972 (hectares)

| Particulars                                   | 1968  | 1969  | 1970   | 1971   | 1972   |
|---|-------|-------|--------|--------|--------|
| Area of plantations established—              |       |       |        |        |        |
| <i>Araucaria</i> spp. (hoop, klinkii) .. .. . | 5,522 | 5,930 | 6,416  | 6,492  | 6,852  |
| Teak .. .. .                                  | 1,483 | 1,794 | 2,006  | 2,170  | 2,273  |
| Kamarere .. .. .                              | 329   | 345   | 407    | 503    | 635    |
| <i>Pinus</i> .. .. .                          | 167   | 540   | 938    | 1,175  | 1,613  |
| Miscellaneous .. .. .                         | 259   | 439   | 608    | 668    | 759    |
| Total .. .. .                                 | 7,760 | 9,048 | 10,375 | 11,008 | 12,132 |
| Plantation area improved or regenerated ..    | 1,191 | 1,191 | 1,191  | 1,191  | 1,191  |

### 3. AREAS UNDER PRIVATE EXPLOITATION AT 30 JUNE 1972

| District                     | Permits |          | Licences |          | Total area |
|------------------------------|---------|----------|----------|----------|------------|
|                              | Number  | Area     | Number   | Area     |            |
|                              |         | hectares |          | hectares | hectares   |
| East and West Sepik .. .. .  | 2       | 16,861   | 1        | 1,820    | 18,681     |
| Western Highlands .. .. .    | 6       | 5,299    | 1        | 627      | 5,926      |
| Eastern Highlands .. .. .    | 8       | 8,657    | 1        | 11       | 8,668      |
| Madang .. .. .               | 2       | 52,204   | 1        | 40       | 52,244     |
| Morobe .. .. .               | 7       | 57,492   | 2        | 1,653    | 59,145     |
| East and West New Britain .. | 11      | 132,924  | 13       | 33,462   | 166,386    |
| Bougainville .. .. .         | 3       | 54,389   | ..       | ..       | 54,389     |
| New Ireland .. .. .          | 4       | 17,757   | 4        | 1,583    | 19,340     |
| Manus .. .. .                | ..      | ..       | ..       | ..       | ..         |
| Central .. .. .              | 7       | 54,855   | 10       | 8,712    | 63,567     |
| Northern .. .. .             | 1       | 1,457    | 1        | 3,343    | 4,800      |
| Milne Bay .. .. .            | 2       | 32,780   | 2        | 2,734    | 35,514     |
| Gulf .. .. .                 | 5       | 48,058   | 1        | 220      | 48,278     |
| Western .. .. .              | ..      | ..       | 1        | 124      | 124        |
| Southern Highlands .. .. .   | 1       | 41,642   | 1        | 1,012    | 42,654     |
| Chimbu .. .. .               | ..      | ..       | ..       | ..       | ..         |
| Total .. .. .                | 59      | 524,375  | 39       | 55,341   | 579,716    |

4. ANNUAL TIMBER YIELD FOR YEARS ENDED 30 JUNE 1968 TO 1972  
(cubic metres)

| Species        | 1968    | 1969    | 1970    | 1971    | 1972    |
|----------------|---------|---------|---------|---------|---------|
| Hardwood .. .. | 348,020 | 332,450 | 443,570 | 655,770 | 794,110 |
| Softwood .. .. | 73,060  | 71,050  | 71,930  | 75,150  | 75,550  |
| Total .. ..    | 421,080 | 403,500 | 515,500 | 730,920 | 869,660 |

5. SAWN TIMBER PRODUCTION FOR YEARS ENDED 30 JUNE 1968 TO 1972  
(cubic metres)

| Species        | 1968   | 1969   | 1970    | 1971    | 1972    |
|----------------|--------|--------|---------|---------|---------|
| Hardwood .. .. | 70,000 | 79,000 | 90,200  | 82,000  | 135,500 |
| Softwood .. .. | 23,500 | 14,000 | 9,800   | 25,000  | 17,600  |
| Total .. ..    | 93,500 | 93,000 | 100,000 | 107,000 | 153,100 |

(Figures in Table 5 are based on recovery rate of 40 per cent for non-conifer and 60 per cent for conifer.)

6. EXPORTS OF TIMBER AND TIMBER PRODUCTS: QUANTITY AND VALUE FOR YEARS ENDED  
30 JUNE 1968 TO 1971

|                                     | 1968   | 1969   | 1970 (r) | 1971 (p) |
|-------------------------------------|--------|--------|----------|----------|
| Logs—                               |        |        |          |          |
| '000 super ft(a) .. ..              | 46,991 | 33,496 | 65,019   | 140,727  |
| Value \$'000 .. ..                  | 1,715  | 1,177  | 2,570    | 5,300    |
| Sawn—                               |        |        |          |          |
| '000 super ft .. ..                 | 6,084  | 6,987  | 7,173    | 6,172    |
| Value \$'000 .. ..                  | 947    | 1,119  | 1,210    | 1,070    |
| Plywood—                            |        |        |          |          |
| '000 sq ft x $\frac{7}{8}$ in .. .. | 25,043 | 24,484 | 26,719   | 26,406   |
| Value \$'000 .. ..                  | 2,264  | 2,252  | 2,529    | 2,505    |
| Veneer sheets—                      |        |        |          |          |
| '000 sq ft x $\frac{1}{8}$ in .. .. | 11,309 | 16,334 | 11,439   | 19,080   |
| Value \$'000 .. ..                  | 120    | 220    | 140      | 245      |
| Battery veneer—                     |        |        |          |          |
| '000 sq ft x $\frac{1}{8}$ in .. .. | 3,470  | 2,416  | 1,955    | 1,120    |
| Value \$'000 .. ..                  | 45     | 31     | 34       | 18       |
| Other—Value \$'000 .. ..            | 18     | 12     | 27       | 53       |
| Total value \$'000 .. ..            | 5,109  | 4,872  | 6,510    | 9,191    |

(a) Hoppers.

## APPENDIX XII

### MINERAL RESERVES

#### 1. AREA OF MINERAL CLAIMS AND LEASES BY SECTION OF POPULATION HELD AT 30 JUNE 1971 (hectares)

##### *Papua*

| Section of population      | Claims    | Mining leases | Total     |
|----------------------------|-----------|---------------|-----------|
| Papua New Guineans .. .. . | 10        | ..            | 10        |
| Expatriates .. .. .        | ..        | 87            | 87        |
| <b>Total</b> .. .. .       | <b>10</b> | <b>87</b>     | <b>97</b> |

#### AREA OF MINERAL CLAIMS AND LEASES BY SECTION OF POPULATION HELD AT 30 JUNE 1972 (hectares)

##### *Papua New Guinea*

| Section of population      | Claims       | Mining leases | Total         |
|----------------------------|--------------|---------------|---------------|
| Papua New Guineans .. .. . | 1,099        | 132           | 1,231         |
| Expatriates .. .. .        | 2,435        | 13,502        | 15,937        |
| <b>Total</b> .. .. .       | <b>3,534</b> | <b>13,634</b> | <b>17,168</b> |

#### 2. PROSPECTING AUTHORITIES AND PETROLEUM PROSPECTING PERMITS AND LICENCES HELD AT 30 JUNE 1970 AND 1971

##### *Papua*

| Authorities                 | Gold and base metals |         |                      |         | Petroleum          |         |                      |         |
|-----------------------------|----------------------|---------|----------------------|---------|--------------------|---------|----------------------|---------|
|                             | Number of licences   |         | Area in square miles |         | Number of licences |         | Area in square miles |         |
|                             | 1969-70              | 1970-71 | 1969-70              | 1970-71 | 1969-70            | 1970-71 | 1969-70              | 1970-71 |
| Prospecting Authority(a) .. | 37                   | 63      | 41,437               | 44,553  | ..                 | ..      | ..                   | ..      |
| Prospecting permits(b) ..   | ..                   | ..      | ..                   | ..      | 11                 | 11      | 60,323               | 53,213  |
| Prospecting licences(c) ..  | ..                   | ..      | ..                   | ..      | 6                  | 8       | 9,908                | 10,396  |

(a) Exclusive right to prospect for gold and other minerals within a stated area and subject to specified conditions. (b) Exclusive rights to prospect for petroleum in specified area. (c) Exclusive rights to carry out detailed surveys and such other operations as are necessary to test the land for petroleum.

## 3. MINES BY PRINCIPAL MINERAL EXTRACTED AND OWNERSHIP AT 30 JUNE 1972

| Nationality of owner or operator         | Principal mineral extracted | Number of mines |
|--|-----------------------------|-----------------|
| Papua New Guinean—Registered claim(a) .. | Gold                        | 412             |
| Expatriate—                              |                             |                 |
| Incorporated mining companies—           |                             |                 |
| Registered in New Guinea .. .. .         | Gold                        | 3               |
|  | Limestone                   | 1               |
|  | Copper                      | 1               |
| Registered in Australia .. .. .          | Gold                        | 6               |
| Registered in Canada .. .. .             | Gold                        | 1               |
| Unincorporated mine operators(b) .. .. . | Gold                        | 8               |
|  | Limestone                   | 1               |
|  | Copper                      | 1               |
| <b>Total .. .. .</b>                     | <b>..</b>                   | <b>434</b>      |

(a) A further 147 individual indigenous producers operated unregistered claims. Approximately 3,432 indigenous people are estimated to have been engaged in these operations at the end of the year. One thousand seven hundred and forty-five separate parcels were declared by indigenous people. (b) Particulars of nationality are not available.

APPENDIX XII—continued

4. MINT RETURNS OF ACTUAL QUANTITY AND VALUE OF MINERALS PRODUCED DURING YEARS ENDED 30 JUNE 1968 TO 1972

| Year    | Gold       |         | Platinum group |       | Silver     |        | Copper      |            | Manganese |       | Limestone   |       |
|---------|------------|---------|----------------|-------|------------|--------|-------------|------------|-----------|-------|-------------|-------|
|         | Fine ounce | Value   | Fine ounce     | Value | Fine ounce | Value  | Tons        | Value      | Tons      | Value | Cubic yards | Value |
|         |            | \$      |                | \$    |            | \$     |             | \$         |           | \$    |             | \$    |
| 1968 .. | 26,413     | 825,404 | ..             | ..    | 17,712     | 30,455 | 2           | 2,412      | ..        | ..    | ..          | ..    |
| 1969 .. | 25,833     | 807,287 | ..             | ..    | 17,138     | 29,620 | ..          | ..         | ..        | ..    | ..          | ..    |
| 1970 .. | 25,523     | 797,589 | 0.04           | 5     | 17,683     | 26,780 | 1           | 1,399      | 3         | 143   | ..          | ..    |
| 1971 .. | 22,277     | 696,148 | ..             | ..    | 16,896     | 23,776 | ..          | ..         | ..        | ..    | ..          | ..    |
| 1972 .. | 25,353     | 792,290 | ..             | ..    | 18,923     | 21,530 | (a) 140,779 | 30,235,818 | ..        | ..    | 1,000       | 1,400 |

(a) Concentrated net tons.

5. PETROLEUM PROSPECTING PERMITS CURRENT AT 30 JUNE 1972

| Authorities                                  | Number of permits | Area   |
|--|-------------------|--------|
| Petroleum prospecting permits, onshore .. .. | 15                | 76,759 |
| Petroleum licences, onshore .. ..            | 7                 | 7,948  |
| Petroleum permits, offshore .. ..            | 12                | 37,314 |

6. NUMBER OF PERSONS ENGAGED IN TYPES OF MINING INDUSTRY DURING YEARS ENDED 30 JUNE 1971 AND 1972

| Type of mining        | 1971               |             |         | 1972               |             |         |
|-----------------------|--------------------|-------------|---------|--------------------|-------------|---------|
|                       | Papua New Guineans | Expatriates | Persons | Papua New Guineans | Expatriates | Persons |
| Underground .. ..     | 26                 | 3           | 29      | 54                 | 6           | 60      |
| Surface .. ..         | 9,955              | 3,307       | 13,262  | 4,190              | 1,428       | 5,618   |
| Oil prospecting .. .. | 789                | 72          | 861     | 850                | 82          | 932     |
| Total .. ..           | 10,770             | 3,382       | 14,152  | 5,094              | 1,516       | 6,610   |

NOTE: Figures exclude persons engaged in non-mining activities.

APPENDIX XIII

INDUSTRIAL PRODUCTION

There are no further figures yet available for this Appendix other than those published last year.



## APPENDIX XIV

### CO-OPERATIVES

#### 1. DETAILS OF CO-OPERATIVE SOCIETIES FOR YEARS ENDED 31 MARCH 1967 TO 1971

##### *Primary Organisations*

##### *Papua*

| Year       | Societies | Members | Capital | Turnover     |           |            |       |
|------------|-----------|---------|---------|--------------|-----------|------------|-------|
|            |           |         |         | Total        | Stores    | Production | Other |
|            |           |         | \$      | \$           | \$        | \$         | \$    |
| 1967 .. .. | 149       | 29,625  | 727,336 | 1,670,650(r) | 1,035,900 | 634,750    | ..    |
| 1968 .. .. | 151       | 30,999  | 793,907 | 1,608,879    | 1,041,178 | 567,701    | ..    |
| 1969 .. .. | 158       | 32,264  | 868,510 | 1,717,885(r) | 1,073,885 | 643,789    | 211   |
| 1970 .. .. | 160       | 34,341  | 911,942 | 1,521,651    | 1,040,505 | 481,146    | ..    |
| 1971 .. .. | 162       | 34,700  | 951,956 | 1,390,195    | 881,033   | 509,126    | 36    |

##### *New Guinea*

| Year       | Societies | Members | Capital   | Turnover     |              |            |       |
|------------|-----------|---------|-----------|--------------|--------------|------------|-------|
|            |           |         |           | Total        | Stores       | Production | Other |
|            |           |         | \$        | \$           | \$           | \$         | \$    |
| 1967 .. .. | 163       | 79,863  | 1,355,885 | 3,326,491(r) | 976,997      | 2,349,494  | ..    |
| 1968 .. .. | 165       | 78,176  | 1,535,498 | 3,769,539    | 1,156,148    | 2,613,391  | ..    |
| 1969 .. .. | 171       | 97,097  | 1,714,247 | 4,544,397    | 1,397,762    | 3,146,635  | ..    |
| 1970 .. .. | 172       | 99,757  | 1,993,437 | 4,700,542(r) | 1,077,788(r) | 3,613,666  | 9,088 |
| 1971 .. .. | 178       | 104,718 | 2,230,171 | 5,580,175    | 1,327,538    | 4,243,705  | 8,932 |

##### *Secondary Organisations*

##### *Papua*

| Year       | Associations | Member societies | Total capital | Total turnover |
|------------|--------------|------------------|---------------|----------------|
|            |              |                  | \$            | \$             |
| 1967 .. .. | 7            | 117              | 306,060       | 672,157        |
| 1968 .. .. | 7            | 116              | 319,076       | 365,126        |
| 1969 .. .. | 7            | 118              | 326,689       | 151,238        |
| 1970 .. .. | 9            | 147              | 395,032       | 120,855        |
| 1971 .. .. | 8            | 137              | 333,938       | 44,982         |

*Secondary Organisations—continued*  
*New Guinea*

| Year |    |    |    |    | Associations | Member societies | Total capital | Total turnover |
|------|----|----|----|----|--------------|------------------|---------------|----------------|
|      |    |    |    |    |              |                  | \$            | \$             |
| 1967 | .. | .. | .. | .. | 7            | 123              | 339,652       | 648,140        |
| 1968 | .. | .. | .. | .. | 7            | 123              | 347,764       | 781,980        |
| 1969 | .. | .. | .. | .. | 7            | 125              | 413,363       | 1,094,543      |
| 1970 | .. | .. | .. | .. | 8(r)         | 128(r)           | 498,250(r)    | 680,922(r)     |
| 1971 | .. | .. | .. | .. | 8            | 138              | 590,138       | 1,019,686      |

*Papua and New Guinea*  
*Tertiary Organisations*

| Year |    |    |    |    | Organisations | Members | Total capital | Total turnover |
|------|----|----|----|----|---------------|---------|---------------|----------------|
|      |    |    |    |    |               |         | \$            | \$             |
| 1967 | .. | .. | .. | .. | 1             | 7       | 130,400       | 661,735        |
| 1968 | .. | .. | .. | .. | 1             | 7       | 165,316       | 787,936        |
| 1969 | .. | .. | .. | .. | 1             | 7       | 165,316       | 950,155        |
| 1970 | .. | .. | .. | .. | 6             | 30      | 233,222       | 55,840         |
| 1971 | .. | .. | .. | .. | 6             | 29      | 331,519       | 72,964         |

*Service Organisations*

| Year |    |    |    |    | Organisations | Members | Total capital | Total turnover |
|------|----|----|----|----|---------------|---------|---------------|----------------|
|      |    |    |    |    |               |         | \$            | \$             |
| 1967 | .. | .. | .. | .. | 4             | 71      | 99,820        | 4,188          |
| 1968 | .. | .. | .. | .. | 6             | 386     | 174,276       | 74,957         |
| 1969 | .. | .. | .. | .. | 5             | 328     | 207,131       | 126,341        |
| 1970 | .. | .. | .. | .. | 7             | 400     | 218,622       | 1,966,979      |
| 1971 | .. | .. | .. | .. | 7             | 323     | 203,872       | 1,657,936      |

APPENDIX XIV—continued

2. CO-OPERATIVE SOCIETIES: MEMBERS, CAPITAL AND TURNOVER DISTRIBUTION AND FIXED ASSETS BY TYPE FOR YEAR ENDED 31 MARCH 1971

Papua

| Type                      | Number | Member-ship | Capital | Turnover  |         |            |       | Distribu-tion | Fixed assets |
|---------------------------|--------|-------------|---------|-----------|---------|------------|-------|---------------|--------------|
|                           |        |             |         | Total     | Stores  | Production | Other |               |              |
|                           |        |             | \$      | \$        | \$      | \$         | \$    | \$            |              |
| Primary organisa-tions .. | 162    | 34,700      | 951,956 | 1,390,195 | 881,033 | 509,126    | 36    | 48,718        | 288,961      |
| Consumer ..               | 21     | 2,078       | 105,077 | 213,252   | 213,252 | ..         | ..    | 1,621         | 41,657       |
| Producer ..               | 5      | 4,048       | 63,189  | 165,569   | 1,051   | 164,482    | 36    | 12,201        | 46,113       |
| Dual purpose ..           | 115    | 25,985      | 741,292 | 1,011,374 | 666,730 | 344,644    | ..    | 34,896        | 199,443      |
| Inactive ..               | 21     | 2,589       | 42,398  | ..        | ..      | ..         | ..    | ..            | 1,748        |
| Associations ..           | 8      | 137         | 333,938 | 44,982    | 38,887  | 145        | 5,950 | 2,095         | 78,749       |

New Guinea

| Type                      | Number | Member-ship | Capital   | Turnover  |           |            |        | Distribu-tion | Fixed assets |
|---------------------------|--------|-------------|-----------|-----------|-----------|------------|--------|---------------|--------------|
|                           |        |             |           | Total     | Stores    | Production | Other  |               |              |
|                           |        |             | \$        | \$        | \$        | \$         | \$     | \$            |              |
| Primary organisa-tions .. | 178    | 104,718     | 2,230,171 | 5,580,175 | 1,327,538 | 4,243,705  | 8,932  | 281,512       | 1,057,148    |
| Consumer ..               | 17     | 7,419       | 159,404   | 458,717   | 458,717   | ..         | ..     | 7,848         | 22,409       |
| Producer ..               | 42     | 44,340      | 924,315   | 2,645,218 | 23,361    | 2,621,857  | ..     | 135,942       | 582,264      |
| Dual purpose ..           | 93     | 46,580      | 1,007,670 | 2,476,240 | 845,460   | 1,621,848  | 8,932  | 137,506       | 415,471      |
| Inactive ..               | 26     | 6,379       | 138,782   | ..        | ..        | ..         | ..     | 216           | 37,004       |
| Associations ..           | 8      | 138         | 590,138   | 1,019,686 | 393,988   | 586,654    | 39,044 | 160,583       | 365,287      |

Papua New Guinea

| Type                       | Number | Members | Capital | Turnover  |           |            |        | Distribu-tion | Fixed assets |
|----------------------------|--------|---------|---------|-----------|-----------|------------|--------|---------------|--------------|
|                            |        |         |         | Total     | Stores    | Production | Other  |               |              |
|                            |        |         | \$      | \$        | \$        | \$         | \$     | \$            |              |
| Service organisations      | 7      | 323     | 203,872 | 1,657,936 | 1,597,103 | ..         | 60,833 | ..            | 306,588      |
| Tertiary organisa-tions .. | 6      | 29      | 331,519 | 72,964    | 1,278     | ..         | 71,686 | ..            | 386,692      |

Note: Figures for year ended 31 March 1972 are not yet available.

APPENDIX XIV—continued

3. PRIMARY ORGANISATIONS: MEMBERS, CAPITAL, TURNOVER AND FIXED ASSETS IN EACH DISTRICT DURING YEAR ENDED 31 MARCH 1971

Papua

| District       | Societies | Members | Capital    | Turnover     |            |            |       | Fixed assets |
|----------------|-----------|---------|------------|--------------|------------|------------|-------|--------------|
|                |           |         |            | Total        | Stores     | Production | Other |              |
| Papua .. ..    | 162       | 34,700  | \$ 951,956 | \$ 1,390,195 | \$ 881,033 | \$ 509,126 | \$ 36 | \$ 288,961   |
| Central .. ..  | 63        | 9,385   | 208,635    | 255,511      | 215,559    | 39,952     | ..    | 87,514       |
| Gulf .. ..     | 37        | 5,900   | 228,007    | 365,994      | 223,203    | 142,791    | ..    | 67,677       |
| Western .. ..  | 4         | 2,887   | 119,259    | 109,472      | 76,845     | 32,627     | ..    | 38,467       |
| Milne Bay ..   | 43        | 10,477  | 311,169    | 392,374      | 277,743    | 114,631    | ..    | 69,113       |
| Northern .. .. | 15        | 6,051   | 84,886     | 266,844      | 87,683     | 179,125    | 36    | 26,190       |

New Guinea

| District             | Societies | Members | Capital      | Turnover     |              |              |          | Fixed assets |
|----------------------|-----------|---------|--------------|--------------|--------------|--------------|----------|--------------|
|                      |           |         |              | Total        | Stores       | Production   | Other    |              |
| New Guinea .. ..     | 178       | 104,718 | \$ 2,230,171 | \$ 5,580,715 | \$ 1,327,538 | \$ 4,243,705 | \$ 8,932 | \$ 1,057,148 |
| East Sepik .. ..     | 19        | 21,196  | 269,717      | 489,361      | 43,874       | 445,487      | ..       | 32,906       |
| Western Highlands .. | 1         | 2,100   | 75,100       | 360,533      | 115,582      | 244,951      | ..       | 32,660       |
| Eastern Highlands .. | 4         | 1,337   | 27,268       | 250,596      | 49,854       | 200,742      | ..       | 23,270       |
| Chimbu .. ..         | 1         | 15,893  | 302,596      | 1,258,204    | ..           | 1,258,204    | ..       | 285,404      |
| Madang .. ..         | 15        | 4,433   | 86,793       | 69,028       | 14,874       | 54,154       | ..       | 18,148       |
| Morobe .. ..         | 13        | 24,530  | 386,333      | 1,096,968    | 275,784      | 812,252      | 9,932    | 210,570      |
| West New Britain ..  | 18        | 4,601   | 153,508      | 341,613      | 234,413      | 107,200      | ..       | 48,751       |
| East New Britain ..  | 18        | 8,106   | 171,771      | 104,730      | 88,361       | 16,369       | ..       | 64,451       |
| Bougainville .. ..   | 23        | 9,037   | 402,451      | 1,243,888    | 359,650      | 884,238      | ..       | 221,306      |
| New Ireland .. ..    | 50        | 9,765   | 240,682      | 217,526      | 45,501       | 172,025      | ..       | 80,748       |
| Manus .. ..          | 16        | 3,720   | 113,952      | 147,728      | 99,645       | 48,083       | ..       | 38,934       |

Note: Figures for year ended 31 March 1972 are not yet available.

4. SECONDARY ORGANISATIONS: MEMBERS, CAPITAL, TURNOVER AND FIXED ASSETS BY DISTRICT DURING YEAR ENDED 31 MARCH 1971

Papua

| District        | Associations | Member societies | Capital    | Turnover  | Fixed assets |
|-----------------|--------------|------------------|------------|-----------|--------------|
| Papua .. ..     | 8            | 137              | \$ 333,938 | \$ 44,982 | \$ 78,749    |
| Gulf .. ..      | 2            | 29               | 100,074    | 24,345    | 26,243       |
| Central .. ..   | 3            | 61               | 109,211    | 359       | 8,877        |
| Northern .. ..  | 1            | 11               | 3,843      | 16,966    | 357          |
| Milne Bay .. .. | 2            | 36               | 120,810    | 3,312     | 43,272       |

New Guinea

| District            | Associations | Member societies | Capital    | Turnover     | Fixed assets |
|---------------------|--------------|------------------|------------|--------------|--------------|
| New Guinea .. ..    | 8            | 138              | \$ 590,138 | \$ 1,019,686 | \$ 365,287   |
| East Sepik .. ..    | 2            | 20               | 258,668    | 647,248      | 250,702      |
| Madang .. ..        | 1            | 13               | 47,598     | 12,088       | 19,092       |
| East New Britain .. | 1            | 29               | 63,590     | 5,787        | 34,962       |
| Bougainville .. ..  | 2            | 17               | 61,980     | 269,187      | 15,231       |
| New Ireland .. ..   | 1            | 46               | 106,381    | 70,141       | 14,192       |
| Manus .. ..         | 1            | 13               | 51,921     | 15,235       | 31,108       |

Note: Figures for year ended 31 March 1972 are not yet available.

## APPENDIX XV

### TRANSPORT AND COMMUNICATIONS

#### 1. LIST OF POST OFFICES AT 30 JUNE 1972

##### *Official Offices*

|           |              |                 |                  |
|-----------|--------------|-----------------|------------------|
| 1. Alotau | 9. Kainantu  | 17. Lae         | 25. Port Moresby |
| 2. Arawa  | 10. Kavieng  | 18. Lorengau    | 26. Rabaul       |
| 3. Boroko | 11. Kerema   | 19. Madang      | 27. Samarai      |
| 4. Buin   | 12. Kieta    | 20. Maprik      | 28. Talasea      |
| 5. Buka   | 13. Kimbe    | 21. Mendi       | 29. Vanimo       |
| 6. Bulolo | 14. Kokopo   | 22. Mount Hagen | 30. Wau          |
| 7. Daru   | 15. Konedobu | 23. Panguna     | 31. Wewak        |
| 8. Goroka | 16. Kundiawa | 24. Popondetta  | 32. Yomba        |

##### *Agency Offices(a)*

|                  |                  |                   |                      |
|------------------|------------------|-------------------|----------------------|
| 1. Abau          | 22. Didibuna     | 43. Kikori        | 64. Okapa            |
| 2. Aitape        | 23. Erave        | 44. Kiunga        | 65. Pangia           |
| 3. Alexishafen   | 24. Esa'ala      | 45. Kokoda        | 66. Pomio            |
| 4. Ambunti       | 25. Ewasse       | 46. Koroba        | 67. Rabaraba         |
| 5. Angoram       | 26. Finschhafen  | 47. Kukipi        | 68. Rouna            |
| 6. Aroma         | 27. Garaina      | 48. Kupiano       | 69. Saidor           |
| 7. Asaro         | 28. Gembogl      | 49. Kwalakessi    | 70. Salamo           |
| 8. Badili        | 29. Goldie River | 50. Kwikila       | 71. Sogeri           |
| 9. Baimuru       | 30. Gumine       | 51. Laiagam       | 72. Tapini           |
| 10. Baiyer River | 31. Hohola       | 52. Losuia        | 73. Tari             |
| 11. Balimo       | 32. Ialibu       | 53. Lumi          | 74. Taurama Barracks |
| 12. Banz         | 33. Igam         | 54. Magarida      | 75. Tinputz          |
| 13. Bereina      | 34. Ihu          | 55. Malabunga     | 76. Toboi            |
| 14. Bogia        | 35. Kabwum       | 56. Malahang      | 77. Tufi             |
| 15. Buambub      | 36. Kagua        | 57. Malalaua      | 78. Ukarumpa         |
| 16. Bulae        | 37. Kaiapit      | 58. Matupit       | 79. Wabag            |
| 17. Bundi        | 38. Kairuku      | 59. Milfordhaven  | 80. Waigani          |
| 18. Bwagaoia     | 39. Kandrian     | 60. Minj          | 81. Wakunai          |
| 19. Cape Rodney  | 40. Kawito       | 61. Moem Barracks | 82. Wapenamanda      |
| 20. Chuave       | 41. Kerowagi     | 62. Mumeng        | 83. Woitape          |
| 21. Dogura       | 42. Keravat      | 63. Namatanai     |                      |

(a) An Agency Post Office is one conducted under contract conditions and may be operated in conjunction with private business activities or under the supervision of staff of other Administration Departments.

#### 2. POSTAL ARTICLES HANDLED DURING YEARS ENDED 30 JUNE 1971 AND 1972

Postal articles handled (millions of articles)

|          |         |
|----------|---------|
| 1970-71  | 1971-72 |
| 56.17(t) | 57.99   |

APPENDIX XV—continued

3. TELEPHONE EXCHANGES: LINE CAPACITY AND SUBSCRIBERS BY LOCATION AT 30 JUNE 1971 AND 1972

| Exchange location            | At 30 June 1971 |               | At 30 June 1972 |               |
|------------------------------|-----------------|---------------|-----------------|---------------|
|                              | Line capacity   | Subscribers   | Line capacity   | Subscribers   |
| <i>Automatic Exchanges—</i>  |                 |               |                 |               |
| Alotau .. .. .               | 100             | 89            | 200             | 109           |
| Arawa .. .. .                | ..              | ..            | 1,000           | 67            |
| Banz .. .. .                 | 50              | 32            | 50              | 37            |
| Boram .. .. .                | 150             | 109           | 150             | 118           |
| Bulolo .. .. .               | 100             | 36            | 100             | 43            |
| Finschhafen .. .. .          | ..              | ..            | 100             | 37            |
| Goroka .. .. .               | ..              | ..            | 1,000           | 522           |
| Kagamuga .. .. .             | 100             | 39            | 100             | 44            |
| Kainantu .. .. .             | ..              | ..            | 200             | 67            |
| Kavieng .. .. .              | 200             | 171           | 200             | 176           |
| Kerema .. .. .               | ..              | ..            | 100             | 71            |
| Keravat .. .. .              | 50              | 15            | 50              | 17            |
| Kieta .. .. .                | ..              | ..            | 400             | 212           |
| Kimbe .. .. .                | ..              | ..            | 100             | 68            |
| Kokopo .. .. .               | 100             | 62            | 100             | 58            |
| Kundiawa .. .. .             | ..              | ..            | 200             | 99            |
| Lae .. .. .                  | 1,600           | 1,571         | 2,000           | 1,849         |
| Madang .. .. .               | 800             | 642           | 1,000           | 687           |
| Mendi .. .. .                | ..              | ..            | 200             | 68            |
| Minj .. .. .                 | 50              | 28            | 50              | 28            |
| Mount Hagen .. .. .          | ..              | ..            | 800             | 390           |
| Nairovi .. .. .              | ..              | ..            | 200             | 5             |
| Panguna .. .. .              | ..              | ..            | 330             | 40            |
| Popondetta .. .. .           | ..              | ..            | 200             | 132           |
| <i>Port Moresby network—</i> |                 |               |                 |               |
| Bomana .. .. .               | 100             | 70            | 100             | 83            |
| Boroka .. .. .               | 4,000           | 3,450         | 5,000           | 4,094         |
| Gerehu .. .. .               | ..              | ..            | 400             | ..            |
| Konedobu .. .. .             | 1,200           | 682           | 1,200           | 796           |
| Moresby Central .. .. .      | 1,200           | 1,106         | 1,200           | 1,131         |
| Sogeri .. .. .               | 50              | 46            | 100             | 50            |
| Rabaul .. .. .               | 1,400           | 1,333         | 1,400           | 1,399         |
| Samarai .. .. .              | 100             | 79            | 100             | 79            |
| Toleap .. .. .               | 100             | 67            | 100             | 64            |
| Wau .. .. .                  | 200             | 136           | 200             | 135           |
| <b>Total</b> .. .. .         | <b>11,650</b>   | <b>9,763</b>  | <b>18,630</b>   | <b>12,775</b> |
| <i>Manual Exchanges—</i>     |                 |               |                 |               |
| Daru .. .. .                 | 200             | 89            | 100             | 90            |
| Finschhafen .. .. .          | 30              | 19            | ..              | ..            |
| Goroka .. .. .               | 500             | 477           | ..              | ..            |
| Kainantu .. .. .             | 100             | 61            | ..              | ..            |
| Kerema .. .. .               | 100             | 65            | ..              | ..            |
| Kieta .. .. .                | 200             | 173           | ..              | ..            |
| Kundiawa .. .. .             | 100             | 85            | ..              | ..            |
| Loirengau .. .. .            | 40              | 38            | 40              | 38            |
| Maprik .. .. .               | ..              | ..            | 80              | ..            |
| Mendi .. .. .                | 100             | 57            | ..              | ..            |
| Mount Hagen .. .. .          | 400             | 376           | ..              | ..            |
| Namatanai .. .. .            | 30              | 20            | 30              | 23            |
| Popondetta .. .. .           | 200             | 111           | ..              | ..            |
| Sohano .. .. .               | 100             | 53            | 100             | 52            |
| Tapini .. .. .               | 30              | 15            | 30              | 18            |
| Vanimo .. .. .               | 100             | 61            | 100             | 71            |
| Wewak .. .. .                | 400             | 246           | 400             | 246           |
| <b>Total</b> .. .. .         | <b>2,630</b>    | <b>1,946</b>  | <b>880</b>      | <b>538</b>    |
| <b>Grand Total</b> .. .. .   | <b>14,280</b>   | <b>11,709</b> | <b>19,510</b>   | <b>13,313</b> |

## 4. TELECOMMUNICATIONS SERVICE

PHYSICAL AND TRAFFIC STATISTICS FOR YEAR ENDED 30 JUNE 1972

| (A) Physical Statistics—                         | 1971-72 |
|--|---------|
| Telephone Exchanges—Automatic .. .. .            | 34      |
| Telephone Exchanges—Manual .. .. .               | 8       |
| Telephone Exchanges—Line Capacity .. .. .        | 19,510  |
| Telephone Exchanges—Subscribers(a) .. .. .       | 13,313  |
| Telephone Trunk Channels—Internal .. .. .        | 237     |
| Telephone Trunk Channels—Overseas—Radio .. .. .  | 19      |
| Telephone Trunk Channels—Overseas—Seacom .. .. . | 21      |
| VHF Telephone Subscribers Networks .. .. .       | 11      |
| VHF Telephone Subscribers .. .. .                | 138     |
| Official Telegraph Offices(b) .. .. .            | 32      |
| Telegraph Trunk Channels .. .. .                 | 366     |
| HF Outstation Networks(c) .. .. .                | 19      |
| HF Outstations—Privately operated .. .. .        | 1,124   |
| HF Outstations—Administration operated .. .. .   | 513     |

## (B) Traffic Statistics—July 1971 to 30 June 1972—

|  |         |
|--|---------|
| Manually Assisted Trunk Line calls handled—Originating—Internal (000's)(d) | 357     |
| Originating—To overseas (000's) .. .. .                                    | 162     |
| Terminating—From overseas (000's) .. .. .                                  | 92      |
| Metered Calls (millions)(d) .. .. .  | 19      |
| Telegrams—Originating (000's) .. .. .                                      | 889     |
| Telex calls—Originating—Internal (paid minutes) .. .. .                    | 54,450  |
| Telex calls—Outgoing—To overseas (paid minutes) .. .. .                    | 175,097 |
| Telex calls—Incoming—From overseas (paid minutes) .. .. .                  | 169,693 |

(a) 'Subscriber' means individual subscribers connected, including party line subscribers (individual) and includes P.T.'s but excludes Tests. (b) 'Official Telegraph Office' means a telegraph office staffed by public service officers of the Department of Posts and Telegraphs. (c) Three HF networks were replaced by the provision of STD VHF circuits whilst one additional HF network was brought into service. (d) With the introduction of STD facilities trunk line calls made by this method are now included as metered calls.

## 5. TELEGRAPH SERVICES: NUMBER OF TELEGRAPH STATIONS AND TELEGRAMS ORIGINATED DURING YEARS ENDED 30 JUNE 1968 TO 1972

| Particulars                       | 1968    | 1969    | 1970    | 1971    | 1972    |
|-----------------------------------|---------|---------|---------|---------|---------|
| Stations .. .. .                  | 1,077   | 1,491   | 1,545   | 1,686   | 1,759   |
| Telegrams lodged for transmission | 620,996 | 680,294 | 784,803 | 856,844 | 888,705 |

## 6. REGULAR AIR TRANSPORT SERVICES FOR YEAR ENDED 30 JUNE 1971

| Particulars                           | International Services |                      |                  |        | Australia-Papua New Guinea services | Papua New Guinea domestic services |
|---------------------------------------|------------------------|----------------------|------------------|--------|-------------------------------------|------------------------------------|
|                                       | Sydney-Hong Kong(a)    | Port Moresby-Honiara | Madang-Djajapura | Total  |                                     |                                    |
| Miles flown ('000) .. .. .            | 1,140                  | 289                  | 22               | 1,451  | 3,633                               | 6,474                              |
| Hours flown .. .. .                   | (c)2,380               | (c)1,584             | 154              | 4,118  | 9,194                               | 40,423                             |
| Passengers embarked .. .. .           | 18,925                 | 6,743                | 421              | 26,089 | 176,344                             | 418,089                            |
| Passenger miles ('000) .. .. .        | 69,358                 | 4,315                | 159              | 73,832 | 217,170                             | 105,329                            |
| Freight embarked (short tons) .. .. . | 913                    | 54                   | 59               | 1,026  | 2,908                               | 7,190                              |
| Freight tons miles ('000) .. .. .     | 3,401                  | 40                   | 23               | 3,464  | 4,215                               | 1,843                              |
| Mail embarked (short tons) .. .. .    | 34                     | 6                    | 1                | 41     | 570                                 | 1,067                              |
| Mail, ton miles ('000) .. .. .        | 155                    | 4                    | (d)              | 159    | 882                                 | 315                                |

(a) Qantas service via Port Moresby. (b) Statistics cover services by T.A.A. (for Qantas) and Fiji Airways. (c) Estimated. (d) 184 Mail ton miles.

Note: Figures for year ended 30 June 1972 are not yet available.

APPENDIX XV—continued

7. EXTERNAL AND INTERNAL REGULAR PUBLIC TRANSPORT SERVICES AT 30 JUNE 1972

| Service category, operator and route  | Weekly frequency | Aircraft type  |
|---|------------------|----------------|
| <i>International Services</i>   |                  |                |
| <i>Air Pacific—</i>   |                  |                |
| Honiara-Port Moresby .. .. .  | 1                | BAC 1-11       |
| Port Moresby-Honiara .. .. .  | 1                | BAC 1-11       |
| <i>Qantas—</i>  |                  |                |
| Singapore-Darwin-Port Moresby .. .. .   | 1                | Boeing 707     |
| Port Moresby-Hong Kong .. .. .  | 1                | Boeing 707     |
| Sydney-Port Moresby-Manila-Hong Kong .. .. .                                  | 1                | Boeing 707     |
| Hong Kong-Port Moresby-Sydney .. .. .   | 1                | Boeing 707     |
| Hong Kong-Manila-Port Moresby .. .. .   | 1                | Boeing 707     |
| Port Moresby-Darwin-Singapore .. .. .   | 1                | Boeing 707     |
| <i>Trans-Australia Airlines (Airlines of New Guinea) on behalf of Qantas—</i> |                  |                |
| Madang-Djayapura .. .. .  | 1 fortnightly    | DC3            |
| Port Moresby-Honiara .. .. .  | 1                | DC9            |
| Rabaul-Buka-Kieta-Munda-Honiara .. .. .                                       | 1                | DC3            |
| Rabaul-Buka-Kieta-Munda-Yandina-Honiara .. .. .                               | 1                | DC3            |
| Djayapura-Madang .. .. .  | 1 fortnightly    | DC3            |
| Honiara-Port Moresby .. .. .  | 1                | DC9            |
| Honiara-Yandina-Munda-Kieta-Buka-Rabaul .. .. .                               | 1                | DC3            |
| Honiara-Munda-Kieta-Buka-Rabaul .. .. .                                       | 1                | DC3            |
| <i>Mainland Services</i>  |                  |                |
| <i>Trans-Australia Airlines—</i>  |                  |                |
| Brisbane-Townsville-Cairns-Port Moresby .. .. .                               | 1                | DC9            |
| Sydney-Brisbane-Port Moresby .. .. .  | 7                | Boeing 727     |
| Townsville-Cairns-Port Moresby .. .. .  | 1                | Fokker F27     |
| Port Moresby-Brisbane-Sydney .. .. .  | 7                | Boeing 727     |
| Port Moresby-Cairns-Townsville .. .. .  | 1                | Fokker F27     |
| Port Moresby-Cairns-Townsville-Mackay-Brisbane-Sydney .. .. .                 | 1                | DC9            |
| <i>Ansett Airlines of Australia—</i>  |                  |                |
| Sydney-Brisbane-Port Moresby .. .. .  | 7                | Boeing 727     |
| Cairns-Port Moresby .. .. .   | 2                | Fokker F27     |
| Port Moresby-Brisbane-Sydney .. .. .  | 7                | Boeing 727     |
| Port Moresby-Cairns-Townsville .. .. .  | 2                | Fokker F27     |
| <i>Intra Papua New Guinea Services</i>  |                  |                |
| <i>Trans-Australia Airlines (Airlines of New Guinea)—</i>                     |                  |                |
| Port Moresby-Lae-Rabaul .. .. .   | 7                | Fokker F27     |
| Port Moresby-Lae-Madang-Wewak .. .. .   | 3                | Fokker F27     |
| Port Moresby-Goroka-Mount Hagen-Madang .. .. .                                | 3                | Fokker F27     |
| Port Moresby-Lae-Goroka-Mount Hagen .. .. .                                   | 4                | Fokker F27     |
| Goroka-Chimbu-Mount Hagen .. .. .   | 3                | Twin Otter     |
| Mount Hagen-Port Moresby .. .. .  | 3                | Fokker F27     |
| Mount Hagen-Wabag-Wapenamanda-Mount Hagen .. .. .                             | 3                | Twin Otter     |
| Port Moresby-Popondetta .. .. .   | 4                | DC3/Twin Otter |
| Popondetta-Port Moresby .. .. .   | 4                | DC3/Twin Otter |
| Port Moresby-Lae .. .. .  | 2                | Fokker F27     |
| Port Moresby-Lae-Goroka-Madang-Wewak .. .. .                                  | 2                | Fokker F27     |
| Port Moresby-Bulolo-Lae .. .. .   | 2                | Twin Otter     |
| Port Moresby-Goroka-Mount Hagen .. .. .                                       | 3                | Fokker F27     |
| Lae-Kainantu-Goroka-Chimbu-Mount Hagen .. .. .                                | 1                | Twin Otter     |
| Lae-Goroka-Mount Hagen .. .. .  | 1                | Fokker F27     |
| Port Moresby-Popondetta-Garaina-Lae .. .. .                                   | 1                | DC3            |
| Port Moresby-Goroka-Madang-Manus .. .. .                                      | 1                | Fokker F27     |
| Port Moresby-Lae-Madang .. .. .   | 2                | Fokker F27     |
| Port Moresby-Lae-Goroka-Madang-Wewak-Manus-Kavieng-Rabaul .. .. .             | 1                | Fokker F27     |
| Rabaul-Namatanai .. .. .  | 1                | Twin Otter     |
| Gurney-Port Moresby .. .. .   | 1                | DC3            |
| Rabaul-Kavieng .. .. .  | 2                | Fokker F27     |
| Port Moresby-Rabaul .. .. .   | 1                | Fokker F27     |



## 7. EXTERNAL AND INTERNAL REGULAR PUBLIC TRANSPORT SERVICES AT 30 JUNE 1972—continued

| Service category, operator and route   | Weekly frequency | Aircraft type |
|--|------------------|---------------|
| <i>Intra Papua New Guinea Services—continued</i>   |                  |               |
| <b>Trans-Australia Airlines—continued</b>  |                  |               |
| Mount Hagen-Goroka-Port Moresby .. .. .  | 1                | Fokker F27    |
| Port Moresby-Rabaul-Kavieng .. .. .  | 2                | Fokker F27    |
| Port Moresby-Mount Hagen .. .. .   | 1                | Fokker F27    |
| Port Moresby-Daru .. .. .  | 1                | Fokker F27    |
| Daru-Port Moresby .. .. .  | 1                | Fokker F27    |
| Kavieng-Rabaul-Lae-Port Moresby .. .. .  | 2                | Fokker F27    |
| Wewak-Madang-Goroka-Lae-Port Moresby .. .. .   | 1                | Fokker F27    |
| Lae-Kainantu-Goroka-Chimbu-Minj-Banz-Mount Hagen .. .. .   | 1                | Twin Otter    |
| Madang-Mount Hagen-Goroka-Lae .. .. .  | 1                | Fokker F27    |
| Mount Hagen-Mendi .. .. .  | 2                | Twin Otter    |
| Mount Hagen-Chimbu-Goroka .. .. .  | 3                | Twin Otter    |
| Mendi-Mount Hagen .. .. .  | 2                | Twin Otter    |
| Madang-Mount Hagen-Goroka-Port Moresby .. .. .   | 2                | Fokker F27    |
| Lae-Bulolo-Port Moresby .. .. .  | 2                | Twin Otter    |
| Lae-Finschhafen-Talasea-Hoskins .. .. .  | 1                | DC3           |
| Rabaul-Lae-Port Moresby .. .. .  | 5                | Fokker F27    |
| Rabaul-Port Moresby .. .. .  | 3                | Fokker F27    |
| Wewak-Madang-Lae-Port Moresby .. .. .  | 4                | Fokker F27    |
| Mount Hagen-Goroka-Lae-Port Moresby .. .. .  | 4                | Fokker F27    |
| Mount Hagen-Chimbu-Goroka-Kainantu-Lae .. .. .   | 1                | Twin Otter    |
| Mount Hagen-Mendi-Port Moresby .. .. .   | 1                | Twin Otter    |
| Lae-Garaina-Popondetta-Port Moresby .. .. .  | 1                | DC3           |
| Port Moresby-Mendi-Mount Hagen .. .. .   | 1                | Twin Otter    |
| Kavieng-Namatanai-Rabaul .. .. .   | 1                | Twin Otter    |
| Mount Hagen-Banz-Minj-Chimbu-Goroka-Kainantu-Lae .. .. .   | 1                | Twin Otter    |
| Rabaul-Kavieng-Manus-Madang-Lae-Port Moresby .. .. .   | 1                | Fokker F27    |
| Hoskins-Talasea-Finschhafen-Lae .. .. .  | 1                | DC3           |
| Namatanai-Rabaul-Tol-Jacquinot Bay-Hoskins-Talasea-Cape Gloucester-Finschhafen-Lae .. .. .         | 1                | Twin Otter    |
| Madang-Goroka-Lae-Port Moresby .. .. .   | 1                | Fokker F27    |
| Manus-Kavieng-Rabaul-Port Moresby .. .. .  | 1                | Fokker F27    |
| Madang-Lae-Port Moresby .. .. .  | 1                | Fokker F27    |
| Lae-Finschhafen-Talasea-Hoskins-Rabaul .. .. .   | 1                | DC3           |
| Port Moresby-Kieta .. .. .   | 4                | Fokker F27    |
| Kikori-Baimuru-Kerema-Port Moresby .. .. .   | 1                | Twin Otter    |
| Port Moresby-Gurney .. .. .  | 1                | DC3           |
| Rabaul-Nissan-Buka-Kieta-Buin .. .. .  | 1                | DC3           |
| Port Moresby-Kerema-Baimuru-Kikori-Daru .. .. .  | 1                | Twin Otter    |
| Port Moresby-Bereina-Malalaua-Kerema-Ihu .. .. .   | 1                | Twin Otter    |
| Lae-Finschhafen-Cape Gloucester-Talasea-Hoskins-Jacquinot Bay-Tol-Rabaul-Namatanai-Kavieng .. .. . | 1                | Twin Otter    |
| Rabaul-Buka-Wakunai-Kieta-Buin .. .. .   | 1                | DC3           |
| Port Moresby-Kerema-Ihu-Baimuru-Kikori .. .. .   | 1                | Twin Otter    |
| Rabaul-Hoskins-Talasea-Lae .. .. .   | 1                | DC3           |
| Port Moresby-Malalaua-Kerema .. .. .   | 1                | Twin Otter    |
| Port Moresby-Kerema-Baimuru-Kikori .. .. .   | 1                | Twin Otter    |
| Lae-Rabaul .. .. .   | 1                | Fokker F27    |
| Rabaul-Kavieng-Manus-Wewak-Madang-Goroka-Lae-Port Moresby .. .. .                                  | 1                | Fokker F27    |
| Mount Hagen-Goroka-Port Moresby .. .. .  | 1                | Fokker F27    |
| Lae-Finschhafen-Kandrian-Gasmata-Talasea-Hoskins-Bialla-Rabaul .. .. .                             | 1                | Twin Otter    |
| Port Moresby-Gurney-Misima .. .. .   | 1 fortnight      | Twin Otter    |
| Port Moresby-Gurney-Esa'Ala .. .. .  | 1                | Twin Otter    |
| Hoskins-Bialla-Jacquinot Bay-Tol-Rabaul .. .. .  | 1                | Twin Otter    |
| Ihu-Kerema-Malalaua-Port Moresby .. .. .   | 1                | Twin Otter    |
| Port Moresby-Daru-Balkmo .. .. .   | 1                | DC3           |
| Port Moresby-Malalaua-Kerema-Ihu .. .. .   | 1                | Twin Otter    |
| Rabaul-Buka-Kieta-Port Moresby .. .. .   | 3                | Fokker F27    |
| Rabaul-Bialla .. .. .  | 1                | Twin Otter    |
| Bialla-Rabaul .. .. .  | 1                | Twin Otter    |
| Buin-Kieta-Wakunai-Buka-Nissan-Rabaul .. .. .  | 1                | DC3           |
| Port Moresby-Bereina-Malalaua .. .. .  | 2                | DC3           |
| Kieta-Rabaul .. .. .   | 1                | Fokker F27    |

APPENDIX XV—continued

7. EXTERNAL AND INTERNAL REGULAR PUBLIC TRANSPORT SERVICES AT 30 JUNE 1972—continued

| Service category, operator and route                                | Weekly frequency | Aircraft type |
|---|------------------|---------------|
| <i>Intra Papua New Guinea Services—continued</i>                    |                  |               |
| <i>Trans-Australian Airlines (Airlines of New Guinea)—continued</i> |                  |               |
| Rabaul-Bialla-Hoskins-Talasea-Gasmata-Kandrian-Finschhafen-Lae ..   | 1                | Twin Otter    |
| Rabaul-Hoskins-Talasea-Finschhafen-Lae .. .. .                      | 1                | DC3           |
| Rabaul-Bialla-Hoskins .. .. .                                       | 1                | Twin Otter    |
| Balimo-Daru-Port Moresby .. .. .                                    | 1                | DC3           |
| Daru-Kikori-Baimuru-Kerema-Malalaua-Port Moresby .. .. .            | 1                | Twin Otter    |
| Buin-Kieta-Buka-Rabaul .. .. .                                      | 1                | DC3           |
| Malalaua-Bereina-Port Moresby .. .. .                               | 2                | DC3           |
| Port Moresby-Bereina-Lae .. .. .                                    | 1                | DC3           |
| Rabaul-Kieta-Port Moresby .. .. .                                   | 1                | Fokker F27    |
| Lae-Talasea-Hoskins-Rabaul .. .. .                                  | 1                | DC3           |
| Kerema-Port Moresby .. .. .   | 1                | Twin Otter    |
| Lae-Bereina-Port Moresby .. .. .                                    | 1                | DC3           |
| Kieta-Buka-Rabaul .. .. .   | 3                | Fokker F27    |
| Kikori-Baimuru-Ihu-Kerema-Port Moresby .. .. .                      | 1                | Twin Otter    |
| Esa'Ala-Gurney-Port Moresby .. .. .                                 | 1                | Twin Otter    |
| Misima-Gurney-Port Moresby .. .. .                                  | 1                | Twin Otter    |
| Ihu-Kerema-Malalaua-Bereina-Port Moresby .. .. .                    | 1                | Twin Otter    |
| Port Moresby-Bereina-Malalaua-Kerema .. .. .                        | 1                | Twin Otter    |
| Kerema-Malalaua-Bereina-Port Moresby .. .. .                        | 1                | Twin Otter    |
| <i>Ansett Airlines of Papua New Guinea—</i>                         |                  |               |
| Rabaul-Buka-Kieta-Buin .. .. .                                      | 1                | DC3           |
| Lae-Kainantu-Goroka-Chimbu-Mount Hagen .. .. .                      | 1                | Twin Otter    |
| Mount Hagen-Mendi .. .. .   | 5                | Twin Otter    |
| Port Moresby-Kieta .. .. .  | 4                | Fokker F27    |
| Port Moresby-Goroka .. .. .   | 2                | Fokker F27    |
| Mount Hagen-Wabag-Wapenamanda .. .. .                               | 1                | Twin Otter    |
| Port Moresby-Lae-Rabaul .. .. .                                     | 8                | Fokker F27    |
| Port Moresby-Lae-Madang-Wewak .. .. .                               | 4                | Fokker F27    |
| Port Moresby-Goroka-Mount Hagen-Madang .. .. .                      | 3                | Fokker F27    |
| Mount Hagen-Goroka .. .. .  | 1                | DC3           |
| Wewak-Vanimo .. .. .  | 1                | Fokker F27    |
| Rabaul-Buka-Kieta .. .. .   | 2                | Fokker F27    |
| Port Moresby-Lae-Goroka-Madang-Wewak-Manus-Kavieng-Rabaul .. .. .   | 1                | Fokker F27    |
| Goroka-Chimbu-Mount Hagen .. .. .                                   | 2                | Twin Otter    |
| Port Moresby-Mount Hagen .. .. .                                    | 1                | Fokker F27    |
| Port Moresby-Lae-Mount Hagen .. .. .                                | 1                | Fokker F27    |
| Mount Hagen-Chimbu-Goroka .. .. .                                   | 1                | Twin Otter    |
| Port Moresby-Buka-Kieta .. .. .                                     | 1                | Fokker F27    |
| Lae-Finschhafen-Talasea-Hoskins .. .. .                             | 1                | DC3           |
| Port Moresby-Rabaul .. .. .   | 3                | Fokker F27    |
| Rabaul-Kavieng .. .. .  | 1                | Fokker F27    |
| Port Moresby-Goroka-Mount Hagen .. .. .                             | 2                | Fokker F27    |
| Port Moresby-Lae-Goroka-Mount Hagen .. .. .                         | 2                | Fokker F27    |
| Hoskins-Talasea-Jacquinet Bay-Rabaul .. .. .                        | 1                | DC3           |
| Rabaul-Buka-Wakunai-Kieta-Buin .. .. .                              | 1                | DC3           |
| Goroka-Chimbu-Mount Hagen .. .. .                                   | 1                | Twin Otter    |
| Mount Hagen-Wabag .. .. .   | 1                | Twin Otter    |
| Port Moresby-Bulolo-Lae .. .. .                                     | 2                | DC3           |
| Lae-Goroka-Chimbu-Minj-Mount Hagen .. .. .                          | 1                | Twin Otter    |
| Port Moresby-Goroka-Madang-Manus .. .. .                            | 1                | Fokker F27    |
| Lae-Goroka-Mount Hagen .. .. .                                      | 1                | DC3           |
| Port Moresby-Lae-Madang-Wewak-Vanimo .. .. .                        | 1                | Fokker F27    |
| Manus-Kavieng-Rabaul .. .. .  | 1                | Fokker F27    |
| Lae-Finschhafen-Talasea-Hoskins-Rabaul .. .. .                      | 1                | DC3           |
| Port Moresby-Lae-Goroka-Madang .. .. .                              | 1                | Fokker F27    |
| Port Moresby-Gurney-Vivigani-Losuia .. .. .                         | 1                | DC3           |
| Port Moresby-Popondetta .. .. .                                     | 6                | Twin Otter    |
| Port Moresby-Tapini .. .. .   | 2                | Twin Otter    |
| Port Moresby-Bereina .. .. .  | 4                | DC3           |
| Port Moresby-Cape Rodney-Paili .. .. .                              | 5                | Twin Otter    |
| Port Moresby-Daru .. .. .   | 2                | F27/DC3       |
| Port Moresby-Tapini-Woitape .. .. .                                 | 2                | Twin Otter    |

7. EXTERNAL AND INTERNAL REGULAR PUBLIC TRANSPORT SERVICES AT 30 JUNE 1972—continued

| Service category, operator and route                                    | Weekly frequency | Aircraft type     |
|---|------------------|-------------------|
| <i>Intra Papua New Guinea Services—continued</i>                        |                  |                   |
| <i>Anssett Airlines of Papua New Guinea—continued</i>                   |                  |                   |
| Port Moresby—Bereina .. .. .  | 1                | Twin Otter        |
| Port Moresby—Cape Rodney .. .. .  | 3                | Skyvan/Twin Otter |
| Port Moresby—Kokoda—Popondetta .. .. .                                  | 1                | Skyvan            |
| Port Moresby—Popondetta—Tufi—Wanigela .. .. .                           | 1                | Twin Otter        |
| Port Moresby—Losuia—Vivigani—Gurney .. .. .                             | 1                | DC3               |
| Port Moresby—Kairuku—Bereina .. .. .                                    | 1                | Twin Otter        |
| Port Moresby—Woitape—Tapini .. .. .                                     | 1                | Twin Otter        |
| Port Moresby—Gurney .. .. .   | 2                | DC3               |
| Daru—Port Moresby .. .. .   | 2                | F27/DC3           |
| Paili—Port Moresby .. .. .  | 5                | Twin Otter        |
| Madang—Mount Hagen—Goroka—Port Moresby .. .. .                          | 2                | Fokker F27        |
| Kieta—Buka—Rabaul .. .. .   | 2                | Fokker F27        |
| Rabaul—Port Moresby .. .. .   | 5                | Fokker F27        |
| Rabaul—Lae—Port Moresby .. .. .   | 7                | Fokker F27        |
| Goroka—Lae—Port Moresby .. .. .   | 1                | Fokker F27        |
| Madang—Lae—Port Moresby .. .. .   | 1                | Fokker F27        |
| Rabaul—Talasea—Hoskins .. .. .  | 1                | DC3               |
| Mendi—Mount Hagen .. .. .   | 3                | Twin Otter        |
| Wabag—Wapenamanda .. .. .   | 1                | Twin Otter        |
| Rabaul—Kavieng—Manus—Madang—Goroka—Lae—Port Moresby .. .. .             | 1                | Fokker F27        |
| Buin—Kieta—Wakunai—Buka—Rabaul .. .. .                                  | 1                | DC3               |
| Mount Hagen—Banz—Chimbu—Goroka .. .. .                                  | 1                | Twin Otter        |
| Vanimo—Wewak—Madang—Lae—Port Moresby .. .. .                            | 2                | Fokker F27        |
| Mount Hagen—Goroka—Lae—Port Moresby .. .. .                             | 2                | Fokker F27        |
| Mount Hagen—Chimbu—Goroka—Kainantu—Lae .. .. .                          | 1                | Twin Otter        |
| Mount Hagen—Goroka—Port Moresby .. .. .                                 | 3                | Fokker F27        |
| Kieta—Rabaul .. .. .  | 2                | Fokker F27        |
| Kieta—Port Moresby .. .. .  | 3                | Fokker F27        |
| Wewak—Madang—Goroka—Lae—Port Moresby .. .. .                            | 1                | Fokker F27        |
| Rabaul—Hoskins—Talasea—Finschhafen—Lae .. .. .                          | 1                | DC3               |
| Rabaul—Kavieng—Manus—Madang—Mount Hagen—Goroka—Lae—Port Moresby .. .. . | 1                | Fokker F27        |
| Rabaul—Jacquinot Bay—Talasea—Hoskins .. .. .                            | 1                | DC3               |
| Mount Hagen—Chimbu—Goroka—Lae .. .. .                                   | 1                | Twin Otter        |
| Goroka—Port Moresby .. .. .   | 1                | Fokker F27        |
| Wewak—Madang—Lae—Port Moresby .. .. .                                   | 2                | Fokker F27        |
| Madang—Mount Hagen—Port Moresby .. .. .                                 | 1                | Fokker F27        |
| Hoskins—Talasea—Lae—Goroka—Lae—Bulolo—Port Moresby .. .. .              | 1                | DC3               |
| Mount Hagen—Minj—Chimbu—Goroka—Kainantu—Lae .. .. .                     | 1                | Twin Otter        |
| Mount Hagen—Goroka—Port Moresby .. .. .                                 | 1                | Fokker F27        |
| Wabag—Wapenamanda—Goroka—Kainantu—Lae .. .. .                           | 1                | Twin Otter        |
| Popondetta—Port Moresby .. .. .   | 6                | Twin Otter        |
| Tapini—Port Moresby .. .. .   | 3                | Twin Otter        |
| Bereina—Port Moresby .. .. .  | 4                | DC3               |
| Bereina—Kairuka—Port Moresby .. .. .                                    | 1                | Twin Otter        |
| Gurney—Port Moresby .. .. .   | 3                | DC3               |
| Cape Rodney—Port Moresby .. .. .  | 3                | Skyvan/Twin Otter |
| Wanigela—Popondetta—Port Moresby .. .. .                                | 1                | Twin Otter        |
| Popondetta—Kokoda—Port Moresby .. .. .                                  | 1                | Twin Otter        |
| Woitape—Port Moresby .. .. .  | 2                | Twin Otter        |
| Rabaul—Kieta .. .. .  | 1                | Fokker F27        |
| Kavieng—Rabaul .. .. .  | 1                | Fokker F27        |
| Port Moresby—Lae—Madang .. .. .   | 1                | Fokker F27        |
| Madang—Goroka—Lae—Port Moresby .. .. .                                  | 1                | Fokker F27        |
| Port Moresby—Lae .. .. .  | 1                | Fokker F27        |
| Lae—Bulolo—Port Moresby .. .. .   | 2                | DC3               |
| Bereina—Port Moresby .. .. .  | 1                | Twin Otter        |
| Goroka—Lae .. .. .  | 1                | DC3               |
| Mount Hagen—Wabag .. .. .   | 1                | Twin Otter        |
| Mendi—Mount Hagen .. .. .   | 1                | Twin Otter        |
| Mendi—Port Moresby .. .. .  | 1                | Twin Otter        |
| Mount Hagen—Wabag—Wapenamanda .. .. .                                   | 1                | Twin Otter        |
| Wapenamanda—Mount Hagen .. .. .   | 1                | Twin Otter        |
| Lae—Kainantu—Goroka—Chimbu—Banz—Mount Hagen .. .. .                     | 1                | Twin Otter        |

APPENDIX XV—continued

8. AERODROMES CLASSIFIED BY CAPACITY LIMITS,  
INDICATING CONTROLLING AUTHORITY AT 30 JUNE 1972

| Aerodrome   | Controlling authority        |
|---|------------------------------|
| <i>(a) Aerodromes suitable for aircraft above 50,000 lb all up weight</i> |                              |
| Papua—  |                              |
| Port Moresby (Jackson's) .. .. .  | Department of Civil Aviation |
| New Guinea—   |                              |
| Lae .. .. .   | Department of Civil Aviation |
| <i>(b) Aerodromes suitable for aircraft up to 50,000 lb all up weight</i> |                              |
| Papua—  |                              |
| Daru .. .. .  | Government                   |
| New Guinea—   |                              |
| Buka .. .. .  | Department of Civil Aviation |
| Goroka .. .. .  | Department of Civil Aviation |
| Kavieng .. .. .   | Department of Civil Aviation |
| Kieta .. .. .   | Government                   |
| Madang .. .. .  | Department of Civil Aviation |
| Momote .. .. .  | Department of Civil Aviation |
| Mount Hagen .. .. .   | Government                   |
| Nadzab .. .. .  | Department of Civil Aviation |
| Rabaul .. .. .  | Department of Civil Aviation |
| Wewak .. .. .   | Department of Civil Aviation |
| Vanimo .. .. .  | Government                   |
| <i>(c) Aerodromes suitable for aircraft up to 30,000 lb all up weight</i> |                              |
| Papua—  |                              |
| Aroa .. .. .  | Private                      |
| Balimo .. .. .  | Government                   |
| Bereina .. .. .   | Government                   |
| Cape Rodney .. .. .   | Government                   |
| Daugo .. .. .   | Government                   |
| Emirau .. .. .  | Private                      |
| Girua .. .. .   | Government                   |
| Gurney .. .. .  | Government                   |
| Kiriwina .. .. .  | Government                   |
| Kokoda .. .. .  | Government                   |
| Koroba .. .. .  | Government                   |
| Malalaua .. .. .  | Government                   |
| Mendi .. .. .   | Government                   |
| Minj .. .. .  | Government                   |
| Morhead .. .. .   | Government                   |
| Rorona .. .. .  | Government                   |
| Tari .. .. .  | Government                   |
| Vivigani .. .. .  | Government                   |
| Wanigela .. .. .  | Government                   |
| New Guinea—   |                              |
| Aiome .. .. .   | Government                   |
| Baiyer River .. .. .  | Government                   |
| Buin .. .. .  | Government                   |
| Dumpu .. .. .   | Government                   |
| Finschhafen .. .. .   | Government                   |
| Garaina .. .. .   | Government                   |
| Hoskins .. .. .   | Government                   |
| Jacquinot Bay .. .. .   | Government                   |
| Kandrian .. .. .  | Government                   |
| Nissan .. .. .  | Government                   |
| Ruti .. .. .  | Government                   |
| Talasea .. .. .   | Government                   |
| Telefomin .. .. .   | Government                   |
| Papua—  |                              |
| Wakunai .. .. .   | Government                   |
| Wapenamanda .. .. .   | Government                   |

8. AERODROMES CLASSIFIED BY CAPACITY LIMITS,  
INDICATING CONTROLLING AUTHORITY AT 30 JUNE 1972—continued

| Aerodrome   | Controlling authority    |
|---|--------------------------|
| (d) Aerodromes suitable for aircraft up to 12,500 lb maximum all up weight on regular public transport services, charter, aerial work and private operations. |                          |
| Papua—  |                          |
| Agaun .. .. .   | Government               |
| Amazon Bay .. .. .  | Government               |
| Baimuru .. .. .   | Government               |
| Cape Vogel .. .. .  | Government               |
| Erave .. .. .   | Government               |
| Esa'Ala .. .. .   | Government               |
| Guasopa .. .. .   | Government               |
| Ialibu .. .. .  | Government               |
| Ihu .. .. .   | Government               |
| Iokea .. .. .   | Local Government Council |
| Ioma .. .. .  | Government               |
| Kagua .. .. .   | Government               |
| Kairuku .. .. .   | Government               |
| Kawito .. .. .  | Private                  |
| Kerema .. .. .  | Government               |
| Kikori .. .. .  | Government               |
| Kiunga .. .. .  | Government               |
| Komo-Mananda .. .. .  | Government               |
| Lake Murray .. .. .   | Government               |
| Margarima .. .. .   | Government               |
| Misima .. .. .  | Government               |
| Namudi .. .. .  | Private                  |
| Nipa .. .. .  | Government               |
| Nomad River .. .. .   | Government               |
| Paili .. .. .   | Government               |
| Pangia .. .. .  | Government               |
| Popondetta .. .. .  | Government               |
| Pureni .. .. .  | Private                  |
| Robinson River .. .. .  | Private                  |
| Raba Raba .. .. .   | Government               |
| Safia .. .. .   | Government               |
| Tapini .. .. .  | Government               |
| Terapo .. .. .  | Private                  |
| Tufi .. .. .  | Government               |
| Weam .. .. .  | Government               |
| Woitape .. .. .   | Government               |
| New Guinea—   |                          |
| Aiyura .. .. .  | Private                  |
| Ambunti .. .. .   | Government               |
| Angoram .. .. .   | Government               |
| Aseki .. .. .   | Government               |
| Awar .. .. .  | Government               |
| Bali .. .. .  | Private                  |
| Banz .. .. .  | Government               |
| Bialla .. .. .  | Local Government Council |
| Boang .. .. .   | Private                  |
| Boku .. .. .  | Government               |
| Bulolo .. .. .  | Private                  |
| Bundi .. .. .   | Government               |
| Cape Gloucester .. .. .   | Government               |
| Chimbu .. .. .  | Government               |
| Gasmata .. .. .   | Government               |
| Green River .. .. .   | Government               |
| Gusap .. .. .   | Private                  |
| Hayfields .. .. .   | Government               |
| Imonda .. .. .  | Government               |
| Kaipit .. .. .  | Government               |
| Kandep .. .. .  | Government               |
| Kainantu .. .. .  | Government               |

## APPENDIX XV—continued

8. AERODROMES CLASSIFIED BY CAPACITY LIMITS,  
INDICATING CONTROLLING AUTHORITY AT 30 JUNE 1972—continued

| Aerodrome   | Controlling authority    |
|---|--------------------------|
| <i>(d) Aerodromes suitable for aircraft up to 12,000 lb maximum all up weight on regular public transport services, charter, aerial work and private operations—continued</i> |                          |
| Karimui .. .. .   | Government               |
| Kar Kar .. .. .   | Government               |
| Kerowagi .. .. .  | Government               |
| Kompian .. .. .   | Government               |
| Kopiago .. .. .   | Government               |
| Lab Lab .. .. .   | Private                  |
| Laiagam .. .. .   | Government               |
| Londolovit .. .. .  | Private                  |
| Lumi .. .. .  | Government               |
| Malekolon .. .. .   | Government               |
| Namatanai .. .. .   | Government               |
| Nondugl .. .. .   | Private                  |
| Nuguria .. .. .   | Private                  |
| Nuku .. .. .  | Government               |
| Omkalai .. .. .   | Government               |
| Rintibi .. .. .   | Private                  |
| Sule .. .. .  | Private                  |
| Tadji .. .. .   | Government               |
| Tol .. .. .   | Private                  |
| Usino .. .. .   | Government               |
| Wabag .. .. .   | Government               |
| Wau .. .. .   | Government               |
| <i>(e) Aerodromes suitable for aircraft up to 12,500 lb maximum all up weight on charter, aerial work and private operations.</i>   |                          |
| Papua—  |                          |
| Afore .. .. .   | Government               |
| Baibara .. .. .   | Private                  |
| Biman .. .. .   | Private                  |
| Biniguni .. .. .  | Private                  |
| Bosavi .. .. .  | Private                  |
| Efogi .. .. .   | Private                  |
| Erume .. .. .   | Private                  |
| Garuahi .. .. .   | Local Government Council |
| Guari .. .. .   | Government               |
| Kagi .. .. .  | Private                  |
| Kaintiba .. .. .  | Government               |
| Kanabea .. .. .   | Private                  |
| Kikinonda .. .. .   | Local Government Council |
| Kokoro .. .. .  | Private                  |
| Kwikila .. .. .   | Private                  |
| Kubuna .. .. .  | Government               |
| Lese .. .. .  | Private                  |
| Loani .. .. .   | Government               |
| Mamai .. .. .   | Private                  |
| Manari .. .. .  | Private                  |
| Manumu .. .. .  | Private                  |
| Murua .. .. .   | Government               |
| Naoro .. .. .   | Private                  |
| Ningerum .. .. .  | Government               |
| Nowata .. .. .  | Government               |
| Olsobip .. .. .   | Government               |
| Panasesa .. .. .  | Government               |
| Pimaga .. .. .  | Local Government Council |
| Poroma .. .. .  | Government               |
| Rumginae .. .. .  | Private                  |
| Sila .. .. .  | Government               |
| Tabubil .. .. .   | Private                  |
| Tetebedi .. .. .  | Private                  |
| Wedau .. .. .   | Private                  |
| Wipim .. .. .   | Local Government Council |

8. AERODROMES CLASSIFIED BY CAPACITY LIMITS,  
INDICATING CONTROLLING AUTHORITY AT 30 JUNE 1972—continued

| Aerodrome  | Controlling authority    |
|--|--------------------------|
| <i>(e) Aerodromes suitable for aircraft up to 12,500 lb maximum all up weight on charter, aerial work and private operations—continued</i> |                          |
| New Guinea—  |                          |
| Aitape .. .. .   | Government               |
| Amanab .. .. .   | Government               |
| Annanberg .. .. .  | Government               |
| Baiune .. .. .   | Private                  |
| Biliau .. .. .   | Private                  |
| Boana .. .. .  | Private                  |
| Bomai .. .. .  | Government               |
| Brahman .. .. .  | Private                  |
| Bunapas .. .. .  | Private                  |
| Derim .. .. .  | Private                  |
| Det .. .. .  | Private                  |
| Dios .. .. .   | Local Government Council |
| Hatzfeldthafen .. .. .   | Government               |
| Ileg .. .. .   | Private                  |
| Indagen .. .. .  | Private                  |
| Inus .. .. .   | Private                  |
| Josephstaal .. .. .  | Government               |
| Kabwum .. .. .   | Government               |
| Kamiraba .. .. .   | Private                  |
| Kar .. .. .  | Private                  |
| Kasanombe .. .. .  | Private                  |
| Keglsugl .. .. .   | Government               |
| Kelanoa .. .. .  | Private                  |
| Kisengan .. .. .   | Private                  |
| Koinambe .. .. .   | Private                  |
| Kol .. .. .  | Government               |
| Konge .. .. .  | Private                  |
| Kudjip .. .. .   | Private                  |
| Kurwina .. .. .  | Private                  |
| Leron Plains .. .. .   | Private                  |
| Linga Linga .. .. .  | Private                  |
| Long Island .. .. .  | Local Government Council |
| Manga .. .. .  | Private                  |
| Mapua .. .. .  | Private                  |
| Marawaka .. .. .   | Government               |
| Menyamyama .. .. .   | Government               |
| Mindik .. .. .   | Private                  |
| Morobe .. .. .   | Government               |
| Nambaiyufa .. .. .   | Government               |
| Obura .. .. .  | Government               |
| Oksapmin .. .. .   | Government               |
| Oria .. .. .   | Government               |
| Pagei .. .. .  | Government               |
| Paiela .. .. .   | Private                  |
| Pindiu .. .. .   | Government               |
| Porgera .. .. .  | Government               |
| Puas .. .. .   | Private                  |
| Sabah .. .. .  | Private                  |
| Saidor .. .. .   | Government               |
| Salamaua .. .. .   | Private                  |
| Sepik Plains .. .. .   | Government               |
| Sialum .. .. .   | Private                  |
| Siassi .. .. .   | Private                  |
| Simbai .. .. .   | Government               |
| Sio .. .. .  | Private                  |
| Siwea .. .. .  | Private                  |
| Stockholm .. .. .  | Private                  |
| Tabibuga .. .. .   | Government               |
| Tambul .. .. .   | Government               |
| Terapo .. .. .   | Government               |
| Taskul .. .. .   | Government               |

APPENDIX XV—continued

8. AERODROMES CLASSIFIED BY CAPACITY LIMITS,  
INDICATING CONTROLLING AUTHORITY AT 30 JUNE 1972—continued

| Aerodrome  | Controlling authority |
|--|-----------------------|
| <i>(e) Aerodromes suitable for aircraft up to 12,500 lb maximum all up weight on charter, aerial work and private operations—continued</i> |                       |
| Tauta .. .. .  | Government            |
| Tonu .. .. .   | Private               |
| Tsili Tsili .. .. .  | Private               |
| Wagau .. .. .  | Government            |
| Wantoat .. .. .  | Government            |
| Wasu .. .. .   | Government            |
| Wirui .. .. .  | Private               |
| Wuvulu .. .. .   | Private               |
| Yalumet .. .. .  | Private               |

*(f) Privately owned aerodromes suitable for aircraft up to 12,500 lb maximum all up weight. Restricted to particular operators.*

*Papua*

|         |          |           |          |
|---------|----------|-----------|----------|
| Alia    | Buya     | Kungim    | Suki     |
| Arufe   | Debepari | Lea Lea   | Trakvits |
| Asapa   | Fugwa    | Mapoda    | Upiara   |
| Atkamba | Hawanae  | Matkomnai | Uroubi   |
| Auwi    | Itokama  | Moro      | Waro     |
| Awaba   | Karaisa  | Obo       | Wasua    |
| Awala   | Kerau    | Orokana   | Wawonga  |
| Benaria | Kibene   | Pangoa    |          |
| Bolovip | Kosipe   | Pori      |          |
| Bosset  | Koumaio  | Pumani    |          |

*New Guinea*

|              |             |              |              |
|--------------|-------------|--------------|--------------|
| Agotu        | Idam        | Marienberg   | Taway        |
| Alkena       | Imani       | Marui        | Tekin        |
| Ama          | Kabori      | Minyanmin    | Tep Tep      |
| Ambullua     | Kaffe       | Monono       | Timboli      |
| Anguganak    | Kairiru     | Moratona     | Timbunke     |
| Aue          | Kamberatoro | Mukili       | Togoba       |
| Babmu        | Kambot      | Muruken      | Torembi      |
| Balam        | Kanainj     | Mushu Island | Tring        |
| Balif        | Kanduanam   | Nagum        | Tumba        |
| Begesin      | Kapaimari   | Narum        | Turinghi     |
| Bema         | Karaitem    | Negrie       | Turubu       |
| Biwat        | Kauapena    | Ningil       | Ulau         |
| Boiken       | Kaugia      | Nomane       | Ulupu        |
| Bungos       | Kaup        | Nugidu       | Urimo        |
| Boru         | Kekesu      | Nugwaia      | Usarumpia    |
| Bukiwi       | Kelabo      | Ossima       | Utai         |
| Bunam        | Keraso      | Oum          | Wabi         |
| Burui        | Kilifas     | Pabarabuk    | Wanangau     |
| But          | Kiniambu    | Pawari       | Wanuma       |
| Chambri      | Kipu        | Pumakos      | Warrabung    |
| Chickenangau | Kirinbit    | Ranara       | Wasai        |
| Chimbian     | Kogi        | Roma         | Wilaru       |
| Chungribu    | Kumbwareta  | Romei        | Wokien       |
| Cosengo      | Kunjingini  | Rotakas      | Wonenara     |
| Dagua        | Kup         | Rulna        | Yagumbok     |
| Dato         | Kwanga      | Sulapa       | Yangoru      |
| Dirima       | Kwomtari    | Sambergi     | Yankisa      |
| Dona         | Laingam     | Sangera      | Yanungen     |
| Driekikir    | Lapalama    | Sassoya      | Yassip       |
| Eliptamin    | Lehu        | Seim         | Yebil        |
| Fas          | Leitre      | Selio Island | Yeftim       |
| Fatima       | Lumusa      | Siangaru     | Yellow River |
| Feramin      | Mageuna     | Sibilanga    | Yemnu        |
| Frieda River | Magleri     | Sipai        | Yili         |
| Gaikorobi    | Mai         | Sissano      | Yihui        |
| Gari Gari    | Mambe       | Suain        | Yimut        |
| Giramben     | Maramba     | Sumumuni     | Yobai        |
| Gnarowein    | Maramuni    | Surusil      |              |
| Hapange      | Marap       | Tau          |              |



APPENDIX XV--continued

Summary of Aerodromes, Classified by Capacity Limits at June 1972

| Aerodromes  | Papua | New Guinea | Papua<br>New Guinea |
|---|-------|------------|---------------------|
| (a) Suitable for aircraft above 50,000 lb all up weight .. ..   | 1     | 1          | 2                   |
| (b) Suitable for aircraft up to 50,000 lb all up weight .. ..   | 1     | 11         | 12                  |
| (c) Suitable for aircraft up to 30,000 lb all up weight .. ..   | 19    | 15         | 34                  |
| (d) Suitable for aircraft up to 12,500 lb all up weight on regular public transport operations, charter, aerial work and private operations.. | 36    | 44         | 80                  |
| (e) Suitable for aircraft up to 12,500 lb all up weight on charter, aerial work and private operations .. ..                                  | 35    | 70         | 105                 |
| (f) Suitable for aircraft up to 12,500 lb all up weight. Privately owned and restricted to particular operators .. ..                         | 37    | 154        | 191                 |
| Total .. ..   | 129   | 295        | 424                 |

9. NUMBER AND TONNAGE OF VESSELS CALLING AT PAPUA NEW GUINEA PORTS FROM OVERSEAS OR OTHER PAPUA NEW GUINEA PORTS BY COUNTRY OF REGISTRY FOR YEAR ENDED 30 JUNE 1972

| Port of call         | From     | Item   | Country of Registry |         |         |        |        |          |        |         |         |         |       |
|----------------------|----------|--------|---------------------|---------|---------|--------|--------|----------|--------|---------|---------|---------|-------|
|                      |          |        | Australia           | Britain | Denmark | Taiwan | France | Germany* | Greece | Holland | Italy   | Japan   | Korea |
|                      |          |        |                     |         |         |        |        |          |        |         |         |         |       |
| Port Moresby .. .. . | Overseas | number | ..                  | 143     | 13      | 1      | 10     | 5        | 1      | 2       | ..      | 10      | ..    |
|                      |          | tons   | ..                  | 354,127 | 3,053   | 2,688  | 42,277 | 15,990   | 4,986  | 6,932   | ..      | 29,365  | ..    |
|                      | P.N.G.   | number | ..                  | 119     | 6       | ..     | 3      | 1        | ..     | 3       | ..      | 30      | ..    |
|                      |          | tons   | ..                  | 65,243  | 1,313   | ..     | 1,620  | 24       | ..     | 19,303  | ..      | 105,193 | ..    |
| Total                | tons     | ..     | 419,370             | 4,366   | 2,688   | 43,897 | 16,014 | 4,986    | 26,235 | ..      | 134,558 | ..      |       |
| Samarai .. .. .      | Overseas | number | ..                  | 23      | ..      | ..     | ..     | ..       | ..     | ..      | ..      | ..      | ..    |
|                      |          | tons   | ..                  | 31,038  | ..      | ..     | ..     | ..       | ..     | ..      | ..      | ..      | ..    |
|                      | P.N.G.   | number | ..                  | 171     | 1       | ..     | ..     | ..       | ..     | ..      | ..      | ..      | ..    |
|                      |          | tons   | ..                  | 71,723  | 162     | ..     | ..     | ..       | ..     | ..      | ..      | ..      | ..    |
| Total                | tons     | ..     | 102,761             | 162     | ..      | ..     | ..     | ..       | ..     | ..      | ..      | ..      |       |
| Rabaul .. .. .       | Overseas | number | 1                   | 57      | 4       | 2      | ..     | ..       | ..     | 2       | 1       | 163     | 5     |
|                      |          | tons   | 298                 | 304,769 | 828     | 163    | ..     | ..       | ..     | 10,923  | 13,397  | 184,296 | 1,925 |
|                      | P.N.G.   | number | 2                   | 110     | 5       | 1      | 7      | 1        | 1      | 3       | ..      | 47      | ..    |
|                      |          | tons   | 9                   | 208,565 | 1,189   | 47     | 4,809  | 766      | 4,987  | 20,832  | ..      | 122,478 | ..    |
| Total                | tons     | 307    | 513,334             | 2,017   | 210     | 4,809  | 766    | 4,987    | 31,755 | 13,397  | 306,774 | 1,925   |       |
| Lae .. .. .          | Overseas | number | ..                  | 51      | 14      | ..     | ..     | 5        | ..     | 6       | ..      | 30      | ..    |
|                      |          | tons   | ..                  | 72,108  | 6,385   | ..     | ..     | 6,176    | ..     | 34,964  | ..      | 98,213  | ..    |
|                      | P.N.G.   | number | ..                  | 306     | 19      | ..     | 6      | 3        | ..     | 5       | ..      | 17      | ..    |
|                      |          | tons   | ..                  | 169,196 | 27,164  | ..     | 4,026  | 2,289    | ..     | 33,101  | ..      | 64,490  | ..    |
| Total                | tons     | ..     | 241,304             | 33,549  | ..      | 4,026  | 8,465  | ..       | 68,065 | ..      | 162,703 | ..      |       |
| Madang .. .. .       | Overseas | number | ..                  | 9       | 2       | ..     | ..     | ..       | ..     | 3       | ..      | 23      | ..    |
|                      |          | tons   | ..                  | 24,080  | 324     | ..     | ..     | ..       | ..     | 20,887  | ..      | 19,728  | ..    |
|                      | P.N.G.   | number | 16                  | 96      | 1       | ..     | 2      | ..       | ..     | ..      | ..      | 27      | ..    |
|                      |          | tons   | 5,412               | 178,525 | 162     | ..     | 170    | ..       | ..     | ..      | ..      | 95,260  | ..    |
| Total                | tons     | 5,412  | 202,605             | 486     | ..      | 170    | ..     | ..       | 20,887 | ..      | 114,988 | ..      |       |
| Kavieng .. .. .      | Overseas | number | ..                  | 3       | 1       | ..     | ..     | ..       | ..     | ..      | ..      | 35      | ..    |
|                      |          | tons   | ..                  | 7,363   | 3,507   | ..     | ..     | ..       | ..     | ..      | ..      | 9,194   | ..    |
|                      | P.N.G.   | number | ..                  | 33      | 7       | ..     | ..     | ..       | ..     | ..      | ..      | 7       | ..    |
|                      |          | tons   | ..                  | 43,618  | 9,869   | ..     | ..     | ..       | ..     | ..      | ..      | 14,748  | ..    |
| Total                | tons     | ..     | 50,981              | 13,376  | ..      | ..     | ..     | ..       | ..     | ..      | 23,942  | ..      |       |

|          |          |             |       |           |        |       |        |        |        |         |        |         |       |
|----------|----------|-------------|-------|-----------|--------|-------|--------|--------|--------|---------|--------|---------|-------|
| Lorengau | Overseas | number tons | ..    | ..        | ..     | ..    | ..     | ..     | ..     | 1       | ..     | ..      | ..    |
|          |          | tons        | ..    | ..        | ..     | ..    | ..     | ..     | ..     | 6,927   | ..     | ..      | ..    |
|          | P.N.G.   | number tons | ..    | ..        | ..     | ..    | ..     | ..     | ..     | ..      | ..     | ..      | ..    |
| Wewak    | Overseas | number tons | ..    | 6         | ..     | ..    | ..     | ..     | ..     | ..      | ..     | 16      | ..    |
|          |          | tons        | ..    | 16,224    | ..     | ..    | ..     | ..     | ..     | ..      | ..     | 52,126  | ..    |
|          | P.N.G.   | number tons | ..    | 62        | ..     | ..    | 1      | ..     | ..     | ..      | ..     | 6       | ..    |
| Kieita   | Overseas | number tons | ..    | 58        | 2      | ..    | 5      | 21     | 1      | 7       | 1      | 24      | ..    |
|          |          | tons        | ..    | 81,847    | 8,361  | ..    | 23,311 | 45,551 | 9,517  | 22,973  | 6,962  | 80,296  | ..    |
|          | P.N.G.   | number tons | ..    | 84        | ..     | ..    | 5      | ..     | ..     | 4       | ..     | 10      | ..    |
| TOTAL    | Overseas | number tons | ..    | 74,284    | ..     | ..    | 3,495  | ..     | ..     | 27,776  | ..     | 35,681  | ..    |
|          |          | tons        | ..    | 142       | 2      | ..    | 10     | 21     | 1      | 11      | 1      | 34      | ..    |
|          | Total    | number tons | ..    | 156,131   | 8,361  | ..    | 26,806 | 45,551 | 9,517  | 50,749  | 6,962  | 115,977 | ..    |
| TOTAL    | Overseas | number tons | 1     | 350       | 36     | 3     | 15     | 31     | 2      | 21      | 2      | 301     | 5     |
|          |          | tons        | 248   | 891,556   | 22,458 | 2,851 | 65,588 | 67,717 | 14,503 | 103,606 | 20,359 | 473,218 | 1,925 |
|          | P.N.G.   | number tons | 18    | 981       | 39     | 1     | 24     | 5      | 1      | 15      | ..     | 144     | ..    |
| TOTAL    | Overseas | number tons | 5,421 | 845,458   | 39,859 | 47    | 14,200 | 3,079  | 4,987  | 101,012 | ..     | 450,841 | ..    |
|          |          | tons        | 19    | 1,331     | 75     | 4     | 39     | 36     | 3      | 36      | 2      | 445     | 5     |
|          | Total    | number tons | 5,719 | 1,737,014 | 62,317 | 2,898 | 79,788 | 70,796 | 19,490 | 204,618 | 20,359 | 924,059 | 1,925 |

\* F.D.R. (a) 1 vessel, Chinese, of 2,668 tons, calling at Lae from overseas; 1 vessel, New Zealand registry, calling at Kavieng.

9. NUMBER AND TONNAGE OF VESSELS CALLING AT PAPUA NEW GUINEA PORTS FROM OVERSEAS OR OTHER PAPUA NEW GUINEA PORTS BY COUNTRY OF REGISTRY FOR YEAR ENDED 30 JUNE 1972—continued

| Port of call       | From     | Item   | Country of registry |        |        |        |             |        |           |        |        |          |          | Total     |
|--------------------|----------|--------|---------------------|--------|--------|--------|-------------|--------|-----------|--------|--------|----------|----------|-----------|
|                    |          |        | Liberia             | Nauru  | Norway | Panama | Philippines | Poland | Singapore | Sweden | U.S.A. | U.S.S.R. | Other(a) |           |
| Port Moresby .. .. | Overseas | number | 3                   | 2      | 7      | 2      | ..          | 1      | 10        | ..     | 16     | 1        | ..       | 227       |
|                    |          | tons   | 21,105              | 10,994 | 19,357 | 4,492  | ..          | 3,764  | 37,567    | ..     | 22,630 | 1,710    | ..       | 581,037   |
|                    | PNG      | number | 3                   | 2      | 3      | 1      | ..          | 5      | ..        | 1      | 5      | ..       | ..       | 182       |
|                    |          | tons   | 5,446               | 10,162 | 6,945  | 2,721  | ..          | 18,237 | ..        | 1,292  | 361    | ..       | ..       | 237,860   |
|                    | Total    | tons   | 26,551              | 21,156 | 26,302 | 7,213  | ..          | 22,001 | 37,567    | 1,292  | 22,991 | 1,710    | ..       | 818,897   |
| Samarai .. ..      | Overseas | number | 1                   | ..     | ..     | ..     | ..          | ..     | ..        | ..     | 1      | ..       | ..       | 25        |
|                    |          | tons   | 1,467               | ..     | ..     | ..     | ..          | ..     | ..        | ..     | 10     | ..       | ..       | 32,515    |
|                    | PNG      | number | ..                  | ..     | ..     | ..     | ..          | ..     | ..        | ..     | 1      | ..       | ..       | 173       |
|                    |          | tons   | ..                  | ..     | ..     | ..     | ..          | ..     | ..        | ..     | 70     | ..       | ..       | 71,955    |
|                    | Total    | tons   | 1,467               | ..     | ..     | ..     | ..          | ..     | ..        | ..     | 80     | ..       | ..       | 104,470   |
| Rabaul .. ..       | Overseas | number | 6                   | 2      | 3      | 2      | 3           | 3      | ..        | 1      | 2      | 1        | ..       | 258       |
|                    |          | tons   | 14,242              | 10,603 | 32,554 | 4,786  | 8,524       | 10,851 | ..        | 14,172 | 182    | 1,401    | ..       | 613,914   |
|                    | PNG      | number | 12                  | 3      | 8      | 1      | ..          | ..     | ..        | ..     | 3      | ..       | ..       | 204       |
|                    |          | tons   | 19,446              | 13,003 | 21,883 | 3,510  | ..          | ..     | ..        | ..     | 190    | ..       | ..       | 421,714   |
|                    | Total    | tons   | 23,688              | 23,606 | 54,437 | 8,296  | 8,524       | 10,851 | ..        | 14,172 | 372    | 1,401    | ..       | 1,035,628 |
| Lae .. ..          | Overseas | number | 4                   | 4      | 5      | 2      | ..          | 4      | ..        | 15     | 1      | 1        | 1        | 143       |
|                    |          | tons   | 8,445               | 9,600  | 7,701  | 4,828  | ..          | 11,429 | ..        | 19,149 | 117    | 1,363    | 2,668    | 283,146   |
|                    | PNG      | number | 4                   | 5      | 4      | ..     | ..          | 2      | ..        | 1      | 1      | ..       | ..       | 373       |
|                    |          | tons   | 9,091               | 24,372 | 11,459 | ..     | ..          | 3,779  | ..        | 2,179  | 171    | ..       | ..       | 351,317   |
|                    | Total    | tons   | 17,536              | 33,972 | 19,160 | 4,828  | ..          | 15,208 | ..        | 21,328 | 288    | 1,363    | 2,668    | 634,463   |
| Madang .. ..       | Overseas | number | 1                   | ..     | 2      | ..     | ..          | ..     | ..        | 1      | 2      | 1        | ..       | 44        |
|                    |          | tons   | 3,144               | ..     | 8,164  | ..     | ..          | ..     | ..        | 1,008  | 205    | 1,401    | ..       | 78,941    |
|                    | PNG      | number | 8                   | 3      | 3      | ..     | ..          | ..     | ..        | 2      | ..     | ..       | ..       | 158       |
|                    |          | tons   | 13,790              | 13,394 | 2,217  | ..     | ..          | ..     | ..        | 3,187  | ..     | ..       | ..       | 312,117   |
|                    | Total    | tons   | 16,934              | 13,394 | 10,381 | ..     | ..          | ..     | ..        | 4,195  | 205    | 1,401    | ..       | 391,058   |
| Kavieng .. ..      | Overseas | number | ..                  | ..     | ..     | ..     | ..          | ..     | ..        | ..     | ..     | ..       | 1        | 40        |
|                    |          | tons   | ..                  | ..     | ..     | ..     | ..          | ..     | ..        | ..     | ..     | ..       | 7        | 20,071    |
|                    | PNG      | number | ..                  | ..     | ..     | ..     | ..          | ..     | ..        | ..     | 1      | ..       | ..       | 48        |
|                    |          | tons   | ..                  | ..     | ..     | ..     | ..          | ..     | ..        | ..     | 4      | ..       | ..       | 68,239    |
|                    | Total    | tons   | ..                  | ..     | ..     | ..     | ..          | ..     | ..        | ..     | 4      | ..       | 7        | 88,310    |

|          |    |    |          |         |         |         |        |       |        |        |        |        |       |       |    |           |           |         |
|----------|----|----|----------|---------|---------|---------|--------|-------|--------|--------|--------|--------|-------|-------|----|-----------|-----------|---------|
| Lorengau | .. | .. | Overseas | number  | ..      | ..      | ..     | ..    | ..     | ..     | 1      | ..     | ..    | ..    | .. | 2         |           |         |
|          |    |    | tons     | ..      | ..      | ..      | ..     | ..    | ..     | ..     | ..     | 6,619  | ..    | ..    | .. | ..        | 13,546    |         |
|          |    |    | number   | ..      | ..      | 8       | ..     | ..    | ..     | ..     | ..     | ..     | ..    | ..    | .. | ..        | ..        | 8       |
|          |    |    | tons     | ..      | ..      | 8,062   | ..     | ..    | ..     | ..     | ..     | ..     | ..    | ..    | .. | ..        | ..        | 8,062   |
| Wewak    | .. | .. | Overseas | number  | 2       | ..      | 2      | ..    | ..     | ..     | ..     | ..     | ..    | ..    | .. | 26        |           |         |
|          |    |    | tons     | 3,961   | ..      | 3,023   | ..     | ..    | ..     | ..     | ..     | ..     | ..    | ..    | .. | ..        | 75,334    |         |
|          |    |    | number   | ..      | ..      | 6       | ..     | ..    | ..     | ..     | ..     | ..     | ..    | ..    | .. | ..        | ..        | 75      |
|          |    |    | tons     | ..      | ..      | 6,047   | ..     | ..    | ..     | ..     | ..     | ..     | ..    | ..    | .. | ..        | ..        | 53,422  |
| Kieta    | .. | .. | Overseas | number  | 8       | 3       | 5      | 3     | ..     | ..     | ..     | ..     | 6     | ..    | .. | 144       |           |         |
|          |    |    | tons     | 11,880  | 12,512  | 21,417  | 12,401 | ..    | ..     | ..     | ..     | ..     | 4,660 | ..    | .. | ..        | 341,688   |         |
|          |    |    | number   | 1       | ..      | ..      | 1      | ..    | ..     | ..     | ..     | ..     | ..    | 3     | .. | ..        | ..        | 108     |
|          |    |    | tons     | 3,144   | ..      | ..      | 2,737  | ..    | ..     | ..     | ..     | ..     | ..    | 142   | .. | ..        | ..        | 147,259 |
| TOTAL    | .. | .. | Overseas | number  | 9       | 3       | 5      | 4     | ..     | ..     | ..     | ..     | 9     | ..    | .. | 252       |           |         |
|          |    |    | tons     | 15,024  | 12,512  | 21,417  | 15,138 | ..    | ..     | ..     | ..     | ..     | 4,802 | ..    | .. | ..        | 488,947   |         |
|          |    |    | number   | 25      | 11      | 24      | 9      | 3     | 8      | 11     | 17     | 28     | 4     | 2     | .. | ..        | 909       |         |
|          |    |    | tons     | 64,244  | 43,709  | 92,216  | 26,507 | 8,524 | 26,044 | 44,186 | 34,329 | 27,804 | 5,875 | 2,675 | .. | ..        | 2,040,192 |         |
| TOTAL    | .. | .. | Overseas | number  | 28      | 13      | 32     | 3     | ..     | 7      | ..     | 4      | 14    | ..    | .. | 1,329     |           |         |
|          |    |    | tons     | 50,917  | 60,931  | 56,613  | 8,968  | ..    | 22,016 | ..     | 6,658  | 938    | ..    | ..    | .. | 1,671,945 |           |         |
|          |    |    | number   | 53      | 24      | 56      | 12     | 3     | 15     | 11     | 21     | 42     | 4     | 2     | .. | ..        | 2,238     |         |
|          |    |    | tons     | 115,161 | 104,640 | 148,829 | 35,475 | 8,524 | 48,060 | 44,186 | 40,987 | 28,742 | 5,875 | 2,675 | .. | ..        | 3,712,137 |         |

(a) 1 vessel, Chinese, of 2,668 tons, calling at Lae from overseas; 1 vessel, New Zealand registry, calling at Kavieng.

APPENDIX XV—continued

10. CARGO LADEN, DISCHARGED AND HANDLED BY PAPUA NEW GUINEA PORTS DURING YEAR ENDED 30 JUNE 1972

| Port                          | Laden      |             |             | Discharged |             |             | Handled    |             |             |
|-------------------------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|
|                               | Ton weight | Ton measure | Revenue ton | Ton weight | Ton measure | Revenue ton | Ton weight | Ton measure | Revenue ton |
| <i>Overseas ports</i>         |            |             |             |            |             |             |            |             |             |
| Port Moresby ..               | 16,786     | 25,564      | 42,350      | 191,730    | 129,337     | 321,067     | 208,516    | 159,901     | 363,417     |
| Samarai ..                    | 6,549      | 2,723       | 9,272       | 4,006      | 4,582       | 8,588       | 10,555     | 7,305       | 17,860      |
| Rabaul ..                     | 102,675    | 273,084     | 375,759     | 108,541    | 61,327      | 169,868     | 211,216    | 334,411     | 545,627     |
| Lae ..                        | 43,709     | 30,518      | 74,227      | 216,832    | 118,555     | 335,387     | 260,541    | 149,073     | 409,614     |
| Madang ..                     | 24,642     | 1,885       | 26,527      | 50,048     | 28,925      | 78,973      | 74,690     | 30,810      | 105,500     |
| Kavieng ..                    | 19,328     | 709         | 20,037      | 3,943      | 3,875       | 7,818       | 23,271     | 4,584       | 27,855      |
| Lorengau ..                   | 1,511      | 632         | 2,143       | 9,691      | 3,532       | 13,223      | 11,202     | 4,164       | 15,366      |
| Wewak ..                      | 1,257      | 5,418       | 6,675       | 6,255      | 15,250      | 21,505      | 7,512      | 20,668      | 28,180      |
| Kieta ..                      | 32,988     | 65,050      | 98,038      | 230,298    | 126,090     | 356,388     | 263,286    | 191,140     | 454,426     |
| Total ..                      | 249,445    | 405,583     | 655,028     | 821,344    | 491,473     | 1,317,817   | 1,070,789  | 897,056     | 1,967,845   |
| <i>Papua New Guinea ports</i> |            |             |             |            |             |             |            |             |             |
| Port Moresby ..               | 962        | 65,414      | 66,376      | 12,107     | 42,742      | 54,849      | 13,069     | 108,156     | 121,225     |
| Samarai ..                    | 1,980      | 5,605       | 7,585       | 2,766      | 7,782       | 10,548      | 4,746      | 13,387      | 18,133      |
| Rabaul ..                     | 56,288     | 22,836      | 79,124      | 41,052     | 17,681      | 58,733      | 97,340     | 40,517      | 137,857     |
| Lae ..                        | 61,551     | 16,685      | 78,236      | 20,276     | 6,051       | 26,327      | 81,827     | 22,736      | 104,563     |
| Madang ..                     | 4,570      | 19,537      | 24,107      | 885        | 30,519      | 31,404      | 5,455      | 50,056      | 55,511      |
| Kavieng ..                    | 109        | 1,393       | 1,502       | 8,682      | 5,911       | 14,593      | 8,791      | 7,304       | 16,095      |
| Lorengau ..                   | ..         | ..          | ..          | 11         | 9           | 20          | 11         | 9           | 20          |
| Wewak ..                      | 279        | 9,210       | 9,489       | 5,942      | 13,640      | 19,582      | 6,221      | 22,850      | 29,071      |
| Kieta ..                      | 912        | 10,437      | 11,349      | 68,332     | 22,476      | 90,808      | 69,244     | 32,913      | 102,157     |
| Total ..                      | 126,651    | 151,117     | 277,768     | 160,053    | 146,811     | 306,864     | 286,704    | 297,928     | 584,632     |
| <i>All ports</i>              |            |             |             |            |             |             |            |             |             |
| Port Moresby ..               | 17,748     | 90,978      | 108,726     | 203,837    | 172,079     | 375,916     | 221,585    | 263,057     | 484,642     |
| Samarai ..                    | 8,529      | 8,328       | 16,857      | 6,772      | 12,364      | 19,136      | 15,301     | 20,692      | 35,993      |
| Rabaul ..                     | 158,963    | 295,920     | 454,183     | 149,593    | 79,008      | 228,601     | 308,556    | 374,928     | 683,484     |
| Lae ..                        | 105,260    | 47,203      | 152,463     | 237,108    | 124,606     | 361,714     | 342,368    | 171,809     | 514,177     |
| Madang ..                     | 29,212     | 21,422      | 50,634      | 50,933     | 59,444      | 110,377     | 80,145     | 80,866      | 161,011     |
| Kavieng ..                    | 19,437     | 2,102       | 21,539      | 12,625     | 9,786       | 22,411      | 32,062     | 11,888      | 43,950      |
| Lorengau ..                   | 1,511      | 632         | 2,143       | 9,702      | 3,541       | 13,243      | 11,213     | 4,173       | 15,386      |
| Wewak ..                      | 1,536      | 14,628      | 16,164      | 12,197     | 28,890      | 41,087      | 13,733     | 43,518      | 57,251      |
| Kieta ..                      | 33,900     | 75,847      | 109,387     | 298,630    | 148,566     | 447,196     | 332,530    | 224,053     | 556,583     |
| Total ..                      | 376,096    | 856,700     | 932,796     | 981,397    | 638,284     | 1,619,681   | 1,357,493  | 1,194,984   | 2,552,477   |

11. MOTOR VEHICLE REGISTRATIONS BY TYPE AND OWNERSHIP AT 31 DECEMBER 1971

| Ownership              | Cars   | Station wagons | Commercial vehicles |            |        |                   |            | Motor cycles | Tractors | Total |        |
|------------------------|--------|----------------|---------------------|------------|--------|-------------------|------------|--------------|----------|-------|--------|
|                        |        |                | Utilities           | Panel vans | Trucks | Other truck-types | Omni-buses |              |          |       |        |
| Private—               |        |                |                     |            |        |                   |            |              |          |       |        |
| Papua New Guinean      | 819    | 251            | 1,497               | 10         | 595    | 2                 | 32         | 2,136        | 383      | 51    | 3,640  |
| Expatriate ..          | 11,667 | 2,464          | 1,885               | 115        | 622    | 6                 | 47         | 2,675        | 1,612    | 90    | 18,508 |
| Government—            |        |                |                     |            |        |                   |            |              |          |       |        |
| Administration ..      | 345    | 171            | 1,428               | 88         | 542    | 24                | 34         | 2,116        | 345      | 486   | 3,463  |
| Commonwealth ..        | 47     | 88             | 172                 | 13         | 223    | 3                 | 3          | 414          | 7        | 53    | 609    |
| Other ..               | 28     | 26             | 159                 | 11         | 108    | 1                 | 5          | 284          | 44       | 106   | 488    |
| Corporate and other .. | 2,011  | 1,048          | 3,385               | 199        | 2,869  | 110               | 267        | 6,830        | 603      | 963   | 11,455 |
| Total ..               | 14,917 | 4,048          | 8,526               | 436        | 4,959  | 146               | 388        | 14,455       | 2,994    | 1,749 | 38,163 |

12. MOTOR VEHICLES REGISTERED BY TYPE OF OWNERSHIP AND REGISTRATION CENTRE  
AT 31 DECEMBER 1971

| Registration centre  | Private           |               | Government      |               |            | Corporate and other | Total         |
|----------------------|-------------------|---------------|-----------------|---------------|------------|---------------------|---------------|
|                      | Papua New Guinean | Expatriate    | Adminis-tration | Common-wealth | Other      |                     |               |
| Alotau .. .. .       | 25                | 65            | 62              | ..            | 1          | 34                  | 187           |
| Bereina .. .. .      | 20                | 24            | ..              | ..            | 4          | 10                  | 58            |
| Bogia .. .. .        | 8                 | 18            | 1               | ..            | 1          | 30                  | 58            |
| Buin .. .. .         | 24                | 42            | 35              | ..            | 1          | 26                  | 128           |
| Bulolo .. .. .       | 15                | 151           | 36              | 1             | 1          | 84                  | 288           |
| Daru .. .. .         | 5                 | 34            | 32              | ..            | 8          | 35                  | 114           |
| Finschhafen .. .. .  | 12                | 24            | 1               | 3             | 4          | 52                  | 96            |
| Goroka .. .. .       | 180               | 819           | 334             | 8             | 54         | 692                 | 2,087         |
| Kainantu .. .. .     | 68                | 206           | 14              | ..            | 20         | 167                 | 475           |
| Kar Kar .. .. .      | 16                | 23            | 2               | ..            | ..         | 57                  | 98            |
| Kavieng .. .. .      | 67                | 218           | 136             | 3             | 8          | 150                 | 582           |
| Kerema .. .. .       | 1                 | 10            | 2               | ..            | 1          | 5                   | 19            |
| Kieta .. .. .        | 107               | 528           | 145             | 10            | 18         | 1,487               | 2,295         |
| Kokopo .. .. .       | 34                | 169           | 89              | ..            | 1          | 186                 | 479           |
| Kundiawa .. .. .     | 44                | 95            | 14              | ..            | 22         | 104                 | 279           |
| Lae .. .. .          | 271               | 2,875         | 427             | 190           | 62         | 2,026               | 5,851         |
| Losuia .. .. .       | 2                 | 1             | 2               | ..            | ..         | 6                   | 11            |
| Madang .. .. .       | 172               | 908           | 233             | 19            | 32         | 572                 | 1,936         |
| Manus .. .. .        | 26                | 93            | 52              | 5             | 1          | 41                  | 218           |
| Maprik .. .. .       | 66                | 47            | 1               | ..            | 3          | 74                  | 191           |
| Mendi .. .. .        | 20                | 71            | 107             | ..            | 8          | 162                 | 368           |
| Minj .. .. .         | 37                | 137           | ..              | ..            | 9          | 124                 | 307           |
| Mount Hagen .. .. .  | 210               | 605           | 274             | 8             | 40         | 576                 | 1,713         |
| Namatanai .. .. .    | 23                | 67            | 11              | ..            | 6          | 57                  | 164           |
| Popondetta .. .. .   | 44                | 145           | 78              | ..            | 14         | 119                 | 400           |
| Port Moresby .. .. . | 1,077             | 8,369         | 696             | 257           | 96         | 2,601               | 13,096        |
| Rabaul .. .. .       | 736               | 1,898         | 322             | 89            | 33         | 1,207               | 4,285         |
| Rigo .. .. .         | 15                | 52            | 2               | ..            | 5          | 41                  | 115           |
| Sohano .. .. .       | 26                | 61            | 23              | ..            | 2          | 68                  | 180           |
| Vanimo .. .. .       | 37                | 49            | 23              | 2             | 5          | 118                 | 234           |
| Wabag .. .. .        | 24                | 56            | 20              | ..            | 7          | 125                 | 232           |
| Wau .. .. .          | 29                | 135           | 20              | ..            | ..         | 82                  | 266           |
| Wewak .. .. .        | 199               | 513           | 269             | 14            | 21         | 337                 | 1,353         |
| <b>Total .. .. .</b> | <b>3,640</b>      | <b>18,508</b> | <b>3,463</b>    | <b>609</b>    | <b>488</b> | <b>11,455</b>       | <b>38,163</b> |

13. ROAD DISTANCES TAKEN FROM ROAD INVENTORY AT MAY 1972  
(distances in kilometres)

| District                   | Highway        | Trunk          | Feeder         | Access         | Other          | Totals          |
|----------------------------|----------------|----------------|----------------|----------------|----------------|-----------------|
| Western .. .. .            | ..             | 325.1          | 94.9           | 236.6          | 323.5          | 980.1           |
| Gulf .. .. .               | ..             | ..             | 53.1           | 173.8          | ..             | 226.9           |
| Central .. .. .            | 128.1          | 53.7           | 371.8          | 839.7          | 79.7           | 1,473.0         |
| Milne Bay .. .. .          | ..             | 31.7           | 128.6          | 48.7           | 135.2          | 344.2           |
| Northern .. .. .           | ..             | 155.3          | 64.5           | 101.7          | 151.1          | 472.6           |
| Southern Highlands .. .. . | 51.8           | 36.4           | 147.6          | 311.2          | 683.8          | 1,230.8         |
| Western Highlands .. .. .  | 134.5          | 339.1          | 103.5          | 300.5          | 615.7          | 1,493.3         |
| Chimbu .. .. .             | 75.3           | 87.4           | 55.4           | 367.2          | 99.9           | 685.2           |
| Eastern Highlands .. .. .  | 198.3          | 74.3           | 132.0          | 743.6          | 205.5          | 1,353.7         |
| Morobe .. .. .             | 191.7          | 189.4          | 118.8          | 445.1          | 124.1          | 1,069.1         |
| Madang .. .. .             | 35.0           | 178.8          | 175.1          | 350.9          | 56.1           | 795.9           |
| East Sepik .. .. .         | 192.7          | 107.2          | 69.8           | 153.5          | 400.1          | 923.3           |
| West Sepik .. .. .         | 41.8           | ..             | 43.6           | 98.2           | 313.0          | 496.6           |
| Manus .. .. .              | ..             | ..             | 35.9           | 21.7           | 20.1           | 77.7            |
| New Ireland .. .. .        | ..             | 423.4          | 93.8           | 249.3          | 139.2          | 905.7           |
| East New Britain .. .. .   | 29.1           | 146.1          | 229.2          | 580.2          | 31.4           | 1,016.0         |
| West New Britain .. .. .   | ..             | 77.4           | 21.8           | 283.3          | 336.2          | 718.7           |
| Bougainville .. .. .       | ..             | 365.3          | 63.1           | 399.8          | 235.9          | 1,064.1         |
| <b>Total .. .. .</b>       | <b>1,078.3</b> | <b>2,590.6</b> | <b>2,002.5</b> | <b>5,705.0</b> | <b>3,950.5</b> | <b>15,326.9</b> |

## APPENDIX XVI

### COST OF LIVING

#### I. AVERAGE RETAIL PRICES OF SELECTED COMMODITIES AT 30 JUNE 1972

| Item                               | Unit      | Average<br>retail price,<br>urban coastal | Average<br>retail price,<br>inland centres | Average<br>retail price,<br>inland outstation | Average<br>retail price,<br>coastal outstation |
|------------------------------------|-----------|---|--|---|--|
|                                    |           | \$  | \$   | \$  | \$   |
| <b>Staple foods—</b>               |           |   |  |   |  |
| Rice .. .. .                       | lb        | 0.13                                      | 0.14                                       | 0.18  | 0.12   |
| Wheatmeal .. .. .                  | lb        | 0.13                                      | 0.20                                       | 0.19  | 0.12   |
| Peas .. .. .                       | lb        | 0.17                                      | 0.33                                       | 0.29  | 0.29   |
| Meat .. .. .                       | 12 oz tin | 0.37                                      | 0.40                                       | 0.41  | 0.43   |
| Dripping .. .. .                   | lb        | 0.36                                      | 0.43                                       | 0.47  | 0.38   |
| Sugar .. .. .                      | lb        | 0.15                                      | 0.22                                       | 0.20  | 0.17   |
| Tea .. .. .                        | lb        | 0.86                                      | 0.88                                       | 1.00  | 0.97   |
| Fresh vegetables .. .. .           | lb        | 0.14                                      | 0.12                                       | 0.13  | 0.11   |
| Tobacco .. .. .                    | stick     | 0.11                                      | 0.11                                       | 0.10  | 0.13   |
| Cigarettes (20) .. .. .            | pkt       | 0.40                                      | 0.40                                       | 0.45  | 0.45   |
| Salt .. .. .                       | lb        | 0.10                                      | 0.17                                       | 0.18  | 0.14   |
| <b>Clothes and domestic items—</b> |           |   |  |   |  |
| Laplap .. .. .                     | each      | 1.25                                      | 1.75                                       | 0.82  | 0.90   |
| Shorts (khaki) .. .. .             | each      | 2.35                                      | 2.50                                       | 2.05  | 1.95   |
| Blankets .. .. .                   | each      | 1.65                                      | 1.90                                       | 1.77  | 1.75   |
| Mosquito nets .. .. .              | each      | 2.80                                      | 1.20                                       | 2.65  | 2.70   |
| Plates .. .. .                     | each      | 0.24                                      | 0.26                                       | 0.27  | 0.28   |
| Spoons .. .. .                     | each      | 0.17                                      | 0.10                                       | 0.15  | 0.18   |
| Matches .. .. .                    | box       | 0.02                                      | 0.02                                       | 0.03  | 0.03   |
| Soap .. .. .                       | 2 lb bar  | 0.37                                      | 0.45                                       | 0.41  | 0.50   |
| Towels .. .. .                     | each      | 1.30                                      | 0.98                                       | 1.10  | 1.24   |
| Kitbags .. .. .                    | each      | 1.56                                      | 2.10                                       | 1.50  | 1.72   |
| Shirts .. .. .                     | each      | 1.96                                      | 2.20                                       | 1.90  | 1.80   |

Average prices from information collected by Division of District Administration field staff. Quality and material of clothing items vary greatly from place to place.



## 2. AVERAGE RETAIL PRICE OF SELECTED COMMODITIES IN THE FOUR MAIN TOWNS FOR MARCH QUARTER 1971 AND YEAR ENDED 30 JUNE 1972

| Item                                     | Port Moresby |       | Lae   |       | Rabaul |       | Madang |       | Goroka |       |
|--|--------------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
|  | 1971         | 1972  | 1971  | 1972  | 1971   | 1972  | 1971   | 1972  | 1971   | 1972  |
|  | cents        | cents | cents | cents | cents  | cents | cents  | cents | cents  | cents |
| <b>Fresh fruit and vegetables—</b>       |              |       |       |       |        |       |        |       |        |       |
| 1 lb aibica .. .. .                      | 8.1          | 9.1   | 4.3   | 3.9   | 3.5    | 4.0   | 3.1    | 4.8   | 6.1    | 6.5   |
| 1 lb pumpkin tips .. .. .                | 7.4          | 6.7   | 4.4   | 4.4   | 4.2    | 4.9   | 5.2    | 5.7   | 4.7    | 5.7   |
| 1 lb sweet potatoes .. .. .              | 6.0          | 5.1   | 2.7   | 2.4   | 1.7    | 2.0   | 2.6    | 2.6   | 3.2    | 2.5   |
| 1 lb taro .. .. .                        | 9.0          | 8.6   | 3.3   | 3.3   | 3.5    | 2.9   | 3.5    | 5.3   | 4.2    | 4.1   |
| 1 lb eating bananas .. .. .              | 5.0          | 5.4   | 3.4   | 3.4   | 3.7    | 3.3   | 2.8    | 3.2   | 7.0    | 6.1   |
| 1 lb peanuts .. .. .                     | 37.9         | 45.7  | 23.5  | 23.2  | 13.5   | 15.6  | 18.1   | 24.9  | 9.1    | 11.9  |
| 1 lb potatoes .. .. .                    | 15.7         | 14.8  | 12.8  | 13.9  | 14.8   | 15.1  | 13.8   | 14.2  | 11.7   | 15.0  |
| 1 lb brown onions .. .. .                | 18.8         | 20.4  | 18.8  | 22.2  | 16.0   | 21.9  | 15.6   | 19.8  | 19.8   | 21.6  |
| <b>Food items—</b>                       |              |       |       |       |        |       |        |       |        |       |
| Loaf of bread(a) .. .. .                 | 20.0         | 22.0  | 20.0  | 20.0  | 20.0   | 20.0  | 20.0   | 20.0  | 25.0   | 25.0  |
| 8 oz navy biscuit .. .. .                | 10.0         | 10.0  | 10.0  | 10.0  | 9.6    | 10.0  | 10.0   | 10.0  | 10.0   | 10.0  |
| 2 lb plain flour .. .. .                 | 23.5         | 25.7  | 24.1  | 26.3  | 23.9   | 27.0  | 23.2   | 24.1  | 28.1   | 27.7  |
| 1 lb rice .. .. .                        | 10.1         | 10.1  | 10.2  | 10.6  | 10.0   | 10.1  | 10.0   | 10.0  | 12.8   | 12.8  |
| 4 oz tea .. .. .                         | 19.4         | 19.9  | 19.4  | 20.1  | 19.7   | 21.6  | 19.5   | 20.3  | 20.6   | 22.7  |
| 2 lb white sugar .. .. .                 | 19.7         | 24.7  | 20.0  | 26.4  | 20.8   | 27.4  | 19.8   | 25.7  | 24.3   | 29.7  |
| 1 lb table salt .. .. .                  | 9.6          | 9.3   | 9.6   | 10.2  | 10.2   | 10.4  | 9.8    | 10.1  | 10.9   | 10.1  |
| 4 oz butter .. .. .                      | 11.4         | 14.8  | 13.6  | 16.9  | 14.4   | 16.1  | 13.1   | 14.8  | 13.6   | 16.8  |
| 14 oz can dripping .. .. .               | 24.7         | 29.7  | 30.6  | 30.5  | 30.0   | 29.9  | 30.0   | 30.9  | 32.5   | 33.5  |
| 8 oz can plum jam .. .. .                | 18.2         | 18.3  | 19.3  | 20.3  | 17.2   | 19.9  | 19.2   | 20.0  | 21.8   | 18.5  |
| 6 oz evaporated milk .. .. .             | 9.6          | 10.0  | 9.7   | 9.9   | 9.9    | 10.4  | 9.8    | 10.4  | 10.0   | 10.6  |
| 1 doz large eggs .. .. .                 | 85.5         | 86.8  | 78.8  | 86.4  | 89.3   | 87.8  | 83.2   | 90.4  | 84.3   | 87.3  |
| 15 oz can fish, mackerel .. .. .         | 20.0         | 20.0  | 20.0  | 19.9  | 20.0   | 20.0  | 20.0   | 20.0  | 22.9   | 22.2  |
| 12 oz can corned beef .. .. .            | 50.1         | 59.3  | 51.0  | 60.0  | 53.1   | 61.7  | 51.1   | 59.2  | 51.9   | 62.0  |
| 1 lb beef, rump steak .. .. .            | 93.5         | 103.7 | 104.9 | 112.1 | 101.6  | 109.0 | 101.7  | 106.7 | 98.0   | 102.5 |
| 1 lb frozen chicken .. .. .              | 62.1         | 64.6  | 58.7  | 62.2  | 57.8   | 61.2  | 59.8   | 61.5  | 62.3   | 63.8  |
| 1 lb beef sausage .. .. .                | 49.0         | 56.5  | 49.2  | 56.8  | 46.1   | 54.2  | 43.9   | 53.2  | 48.1   | 57.2  |
| <b>Other than food—</b>                  |              |       |       |       |        |       |        |       |        |       |
| Box of matches .. .. .                   | 2.0          | 2.0   | 2.0   | 2.1   | 2.4    | 2.3   | 2.0    | 2.0   | 2.1    | 2.2   |
| Bath size toilet soap .. .. .            | 14.0         | 14.7  | 14.1  | 15.1  | 14.8   | 14.8  | 13.7   | 15.0  | 15.2   | 15.3  |
| 2½ oz tube of toothpaste .. .. .         | 34.0         | 34.7  | 30.8  | 31.2  | 31.7   | 32.9  | 32.9   | 32.2  | 29.0   | 26.8  |
| Packet of five razor blades .. .. .      | 20.9         | 21.1  | 20.0  | 20.0  | 20.0   | 20.0  | 20.0   | 20.0  | 22.8   | 23.6  |
| 1½ lb laundry soap .. .. .               | 29.6         | 30.6  | 30.0  | 33.2  | 29.4   | 32.7  | 29.4   | 30.2  | 33.0   | 36.3  |
| 4 gal kerosene refill .. .. .            | 158.0        | 164.0 | 158.1 | 163.7 | 147.5  | 151.7 | 142.6  | 140.5 | 200.0  | 200.0 |
| <b>Alcohol, tobacco and betel-nut—</b>   |              |       |       |       |        |       |        |       |        |       |
| Beer, carton of 2 doz 'stubbies' .. .. . | 572.6        | 631.0 | 531.3 | 641.6 | 479.8  | 645.3 | 530.8  | 555.0 | 604.2  | 711.0 |
| 20 cigarettes 'A'(b) .. .. .             | 33.1         | 35.0  | 33.0  | 35.0  | 33.0   | 35.0  | 33.0   | 35.0  | 34.0   | 35.4  |
| Stick, twist tobacco .. .. .             | 9.8          | 10.3  | 10.0  | 10.0  | 10.0   | 10.0  | 10.0   | 10.0  | 10.0   | 10.0  |
| 1 lb betel-nut .. .. .                   | 26.0         | 21.7  | 14.3  | 9.6   | 4.0    | 5.9   | 11.5   | 11.2  | 52.5   | 37.6  |

(a) Port Moresby, Lae: Sliced, wrapped, 2 lb; Rabaul: Unsliced, unwrapped, 2 lb; Madang: Unsliced, wrapped, 1½ lb; Goroka: Unsliced, wrapped, 2 lb. (b) Locally made brands.

APPENDIX XVI—continued

3. RETAIL PRICE INDEX (FOOD, TOBACCO AND CERTAIN HOUSEHOLD SUNDRIES) RELATED TO NON-INDIGENOUS HOUSEHOLD EXPENDITURE IN THE THREE MAIN TOWNS (PORT MORESBY, LAE AND RABAUL) COMBINED

| Period |         |                   |    |    | Index numbers (three main towns combined) |                        |                    |                      |
|--------|---------|-------------------|----|----|---|------------------------|--------------------|----------------------|
|        |         |                   |    |    | Food                                      | Tobacco and cigarettes | Household sundries | Whole (three groups) |
| Year   | 1961-62 | ..                | .. | .. | 100.0                                     | 100.0                  | 100.0              | 100.0                |
|        | 1962-63 | ..                | .. | .. | 97.2                                      | 99.0                   | 100.7              | 97.8                 |
|        | 1963-64 | ..                | .. | .. | 99.3                                      | 98.9                   | 100.9              | 99.5                 |
|        | 1964-65 | ..                | .. | .. | 102.1                                     | 105.1                  | 104.0              | 102.7                |
|        | 1965-66 | ..                | .. | .. | 107.7                                     | 110.0                  | 108.8              | 108.1                |
|        | 1966-67 | ..                | .. | .. | 109.7                                     | 126.6                  | 110.8              | 111.7                |
|        | 1967-68 | ..                | .. | .. | 111.7                                     | 131.7                  | 112.9              | 114.0                |
|        | 1968-69 | ..                | .. | .. | 111.3                                     | 131.1                  | 114.0              | 113.8                |
|        | 1969-70 | ..                | .. | .. | 111.6                                     | 137.1                  | 112.1              | 114.5                |
|        | 1970-71 | ..                | .. | .. | 116.1                                     | 139.6                  | 112.7              | 118.5                |
|        | 1966    | September quarter | .. | .. | 109.6                                     | 113.9                  | 109.8              | 110.1                |
|        |         | December quarter  | .. | .. | 109.4                                     | 129.7                  | 110.4              | 111.8                |
|        | 1967    | March quarter     | .. | .. | 109.8                                     | 131.2                  | 111.4              | 112.4                |
|        |         | June quarter      | .. | .. | 109.9                                     | 131.6                  | 111.4              | 112.5                |
|        |         | September quarter | .. | .. | 110.7                                     | 131.8                  | 112.5              | 113.2                |
|        |         | December quarter  | .. | .. | 111.5                                     | 131.8                  | 113.0              | 113.9                |
|        | 1968    | March quarter     | .. | .. | 112.5                                     | 131.8                  | 113.0              | 114.7                |
|        |         | June quarter      | .. | .. | 112.2                                     | 131.5                  | 113.2              | 114.4                |
|        |         | September quarter | .. | .. | 111.7                                     | 131.2                  | 113.8              | 114.1                |
|        |         | December quarter  | .. | .. | 111.6                                     | 131.1                  | 114.1              | 114.1                |
|        | 1969    | March quarter     | .. | .. | 111.1                                     | 131.0                  | 114.1              | 113.6                |
|        |         | June quarter      | .. | .. | 110.9                                     | 131.1                  | 114.1              | 113.4                |
|        |         | September quarter | .. | .. | 111.4                                     | 133.0                  | 113.1              | 114.0                |
|        |         | December quarter  | .. | .. | 111.4                                     | 137.8                  | 111.5              | 114.4                |
|        | 1970    | March quarter     | .. | .. | 111.6                                     | 138.5                  | 111.8              | 114.6                |
|        |         | June quarter      | .. | .. | 112.0                                     | 138.9                  | 112.0              | 115.0                |
|        |         | September quarter | .. | .. | 112.5                                     | 139.3                  | 111.4              | 115.4                |
|        |         | December quarter  | .. | .. | 115.2                                     | 139.4                  | 111.7              | 117.6                |
|        | 1971    | March quarter     | .. | .. | 117.4                                     | 139.4                  | 113.2              | 119.4                |
|        |         | June quarter      | .. | .. | 119.1                                     | 140.4                  | 114.3              | 121.7                |
|        |         | September quarter | .. | .. | 122.8                                     | 141.7                  | 115.6              | 124.1                |
|        |         | December quarter  | .. | .. | 126.6                                     | 143.8                  | 117.0              | 127.5                |
|        | 1972    | March*            | .. | .. | 128.2                                     | 147.6                  | 118.6              | 129.4                |

\* Discontinued with March Quarter, replaced by Consumer Price Index.

Figures appearing after the decimal point are inserted to avoid the distortions that would sometimes occur if the indexes were rounded off to the nearest whole number. They do not imply that the indexes possess an accuracy of the order of one-tenth of an index 'point'.

## APPENDIX XVII

### LABOUR

#### 1. PAPUA NEW GUINEAN WORKFORCE CLASSIFIED BY INDUSTRY GROUP AT 31 MARCH 1965 TO 1967 AND AT 30 JUNE 1968 AND 1970

| Industry group                                  | March<br>1965 | March<br>1966 | March<br>1967  | June<br>1968   | June<br>1970   |
|---|---------------|---------------|----------------|----------------|----------------|
| Fishing, hunting and trapping(a) .. .. .        | ..            | ..            | ..             | ..             | 141            |
| Coconut planting .. .. .                        | ..            | ..            | ..             | ..             | 4,679          |
| Cocoa .. .. .                                   | ..            | ..            | ..             | ..             | 2,857          |
| Cocoa copra .. .. .                             | 26,184        | 25,370        | 26,617         | 29,856         | 22,605         |
| Coffee .. .. .                                  | 5,661         | 5,054         | 5,523          | 7,943          | 6,987          |
| Rubber .. .. .                                  | 6,565         | 6,158         | 6,475          | 5,848          | 6,252          |
| Tea .. .. .                                     | ..            | ..            | 1,613          | 2,947          | 5,044          |
| Other rural .. .. .                             | 4,307         | 2,621         | 1,498          | 3,830          | 1,481          |
| Forestry .. .. .                                | 2,117         | 3,029         | 1,624          | 1,933          | 3,551          |
| Mining and quarrying .. .. .                    | 1,758         | 1,448         | 1,439          | 1,261          | 2,477          |
| Sawmilling .. .. .                              | ..            | ..            | 3,463          | 4,251          | 3,592          |
| Founding, engineering, metalworking .. .. .     | ..            | ..            | ..             | ..             | 857            |
| Other manufacturing .. .. .                     | 2,869         | 3,424         | 3,711          | 4,526          | 4,730          |
| Electricity, gas, water, etc. .. .. .           | ..            | ..            | 1,023          | 905            | 1,565          |
| Building and construction .. .. .               | 9,765         | 11,973        | 12,408         | 12,552         | 13,303         |
| Transport and storage .. .. .                   | 4,341         | 4,559         | 5,103          | 4,791          | 5,048          |
| Communications .. .. .                          | 496           | 559           | 594            | 697            | 882            |
| Finance and property .. .. .                    | ..            | ..            | 202            | 554            | 434            |
| Commerce .. .. .                                | 3,891         | 4,577         | 5,495          | 7,657          | 13,000         |
| Law and order .. .. .                           | 2,898         | 2,943         | 3,041          | 3,096          | 3,241          |
| Public authority .. .. .                        | ..            | ..            | ..             | 8,723          | 8,950          |
| Religion and welfare .. .. .                    | ..            | ..            | ..             | (b)5,069       | 3,111          |
| Health .. .. .                                  | 20,034        | 21,871        | 19,575         | 1,452          | 2,500          |
| Education .. .. .                               | ..            | ..            | ..             | 3,718          | 6,180          |
| Other business and community services .. .. .   | ..            | ..            | ..             | 1,928          | 2,159          |
| Amusements, recreation, etc. .. .. .            | 867           | 605           | 1,491          | 2,204          | 2,959          |
| <b>Total Papua New Guinea Workforce .. .. .</b> | <b>91,753</b> | <b>94,191</b> | <b>100,895</b> | <b>115,741</b> | <b>128,585</b> |

(a) Included with 'Other rural'. (b) This figure includes some Mission teachers.

Note: Figures for 1971 are not yet available.

## 2. PAPUA NEW GUINEAN WORKFORCE CLASSIFIED BY DISTRICT OF BIRTH AND EMPLOYMENT AT 30 JUNE 1970

| District of birth          | District of employment |       |         |           |          |                    |                   |        |                   |            |            |        |        |                  |                  |             |              |       |         | Total |
|----------------------------|------------------------|-------|---------|-----------|----------|--------------------|-------------------|--------|-------------------|------------|------------|--------|--------|------------------|------------------|-------------|--------------|-------|---------|-------|
|                            | Western                | Gulf  | Central | Milne Bay | Northern | Southern Highlands | Eastern Highlands | Chimbu | Western Highlands | West Sepik | East Sepik | Madang | Morobe | West New Britain | East New Britain | New Ireland | Bougainville | Manus |         |       |
| Western .. .. .            | 1,395                  | 189   | 899     | 133       | 24       | 45                 | 22                | 8      | 43                | 6          | 14         | 35     | 67     | 4                | 24               | 2           | 33           | ..    | 2,943   |       |
| Gulf .. .. .               | 108                    | 1,054 | 2,377   | 70        | 108      | 39                 | 82                | 22     | 83                | 21         | 49         | 64     | 221    | 38               | 159              | 42          | 221          | 8     | 4,766   |       |
| Central .. .. .            | 82                     | 93    | 8,386   | 111       | 293      | 53                 | 177               | 44     | 136               | 28         | 57         | 147    | 409    | 54               | 166              | 15          | 194          | 8     | 10,453  |       |
| Milne Bay .. .. .          | 29                     | 33    | 1,456   | 3,045     | 226      | 22                 | 106               | 34     | 68                | 20         | 20         | 120    | 343    | 20               | 134              | 62          | 64           | 5     | 5,807   |       |
| Northern .. .. .           | 48                     | 14    | 993     | 97        | 1,903    | 29                 | 95                | 38     | 66                | 18         | 22         | 62     | 258    | 16               | 60               | 6           | 97           | ..    | 3,822   |       |
| Southern Highlands .. .. . | 6                      | 114   | 1,635   | 2         | 150      | 1,862              | 130               | 14     | 2,032             | 1          | 4          | 241    | 254    | 195              | 2,257            | 506         | 508          | ..    | 9,911   |       |
| Eastern Highlands .. .. .  | 24                     | 82    | 2,617   | 12        | 302      | 44                 | 5,020             | 128    | 574               | 9          | 12         | 156    | 798    | 184              | 1,210            | 619         | 992          | 37    | 12,820  |       |
| Chimbu .. .. .             | ..                     | 78    | 1,207   | 8         | 103      | 67                 | 1,393             | 1,126  | 2,474             | 16         | 24         | 560    | 426    | 210              | 537              | 511         | 1,128        | 14    | 9,882   |       |
| Western Highlands .. .. .  | 11                     | 51    | 2,062   | 5         | 65       | 94                 | 327               | 35     | 7,401             | 4          | 16         | 693    | 246    | 291              | 1,559            | 170         | 433          | 7     | 13,470  |       |
| West Sepik .. .. .         | 17                     | 6     | 138     | 2         | 19       | 5                  | 30                | 14     | 328               | 1,245      | 542        | 594    | 142    | 155              | 913              | 1,133       | 571          | 143   | 5,997   |       |
| East Sepik .. .. .         | 21                     | 3     | 255     | 12        | 31       | 36                 | 88                | 12     | 106               | 215        | 2,075      | 497    | 657    | 257              | 1,690            | 510         | 595          | 158   | 7,218   |       |
| Madang .. .. .             | 16                     | 4     | 300     | 11        | 161      | 39                 | 253               | 93     | 250               | 28         | 141        | 4,872  | 565    | 227              | 1,155            | 336         | 434          | 227   | 9,112   |       |
| Morobe .. .. .             | 32                     | 14    | 1,149   | 48        | 537      | 56                 | 290               | 99     | 250               | 115        | 64         | 528    | 9,344  | 264              | 1,933            | 575         | 418          | 36    | 15,752  |       |
| West New Britain .. .. .   | 3                      | ..    | 155     | 5         | 10       | 6                  | 16                | 16     | 27                | 9          | 35         | 32     | 79     | 1,782            | 1,647            | 186         | 84           | 29    | 4,121   |       |
| East New Britain .. .. .   | 17                     | 5     | 467     | 17        | 11       | 32                 | 97                | 34     | 80                | 41         | 39         | 66     | 159    | 287              | 3,036            | 83          | 219          | 29    | 4,721   |       |
| New Ireland .. .. .        | 5                      | 79    | 136     | 9         | 10       | 12                 | 37                | 6      | 24                | 11         | 24         | 35     | 36     | 67               | 438              | 1,763       | 56           | 28    | 2,776   |       |
| Bougainville .. .. .       | 4                      | ..    | 176     | 4         | 5        | 11                 | 30                | 20     | 11                | ..         | 11         | 21     | 49     | 27               | 224              | 41          | 2,299        | 10    | 2,943   |       |
| Manus .. .. .              | 4                      | 1     | 189     | 7         | 7        | 15                 | 43                | 14     | 38                | 27         | 63         | 111    | 97     | 85               | 212              | 97          | 72           | 784   | 1,866   |       |
| Other(a) .. .. .           | 2                      | 3     | 45      | 6         | 35       | 3                  | 11                | 2      | 4                 | 4          | 9          | 3      | 12     | 8                | 21               | 9           | 18           | 10    | 205     |       |
| Total .. .. .              | 1,824                  | 1,823 | 24,642  | 3,604     | 4,000    | 2,470              | 8,247             | 1,759  | 13,995            | 1,818      | 3,221      | 8,837  | 14,162 | 4,171            | 17,375           | 6,668       | 8,436        | 1,533 | 128,585 |       |

(a) West Irian and British Solomon Islands.

Note: Figures for 1971 and 1972 are not yet available.

## 3. PAPUA NEW GUINEAN WORKFORCE CLASSIFIED BY SEX, OCCUPATION GROUP AND WEEKLY WAGE GROUP AT 30 JUNE 1970

## Part A—Males

| Occupation Group | Weekly Wage Group (\$) |              |              |              |              |              |              |               |                |                |                |                |                |                |                |                |                |                |                |                |                | Total |                |                |                |                |                |                |                |                |        |     |   |
|------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|-----|---|
|                  | Up to 3.50             | 3.51 to 4.50 | 4.51 to 5.50 | 5.51 to 6.50 | 6.51 to 7.50 | 7.51 to 8.50 | 8.51 to 9.50 | 9.51 to 10.50 | 10.51 to 11.50 | 11.51 to 13.50 | 13.51 to 15.50 | 15.51 to 17.50 | 17.51 to 19.50 | 19.51 to 21.50 | 21.51 to 23.50 | 23.51 to 25.50 | 25.51 to 27.50 | 27.51 to 31.50 | 31.51 to 35.50 | 35.51 to 39.50 | 39.51 to 43.50 |       | 43.51 to 47.50 | 47.51 to 51.50 | 51.51 to 55.50 | 55.51 to 59.50 | 59.51 to 67.50 | 67.51 to 75.50 | 75.51 to 83.50 | 83.51 and over |        |     |   |
| 006              |                        |              |              |              |              |              |              | 1             |                |                |                |                |                | 7              | 1              |                |                |                |                |                |                |       |                |                |                |                |                |                |                |                |        |     | 9 |
| 025              |                        |              | 5            |              | 20           |              |              |               |                |                |                |                |                | 1              | 8              |                | 4              |                |                | 7              | 5              | 2     | 4              |                | 4              |                | 1              |                |                |                |        | 75  |   |
| 026              |                        |              |              |              |              |              |              |               |                |                |                |                |                |                |                |                |                |                |                |                |                |       |                |                |                |                |                |                |                |                |        | 5   |   |
| 030              | 1                      |              |              |              |              |              |              |               |                |                |                |                |                |                | 2              |                |                |                |                |                |                | 3     |                |                | 3              | 3              | 2              |                |                |                |        | 36  |   |
| 035-040          |                        | 7            | 1            |              |              |              |              |               |                |                |                |                |                |                | 2              |                | 7              |                |                |                |                | 2     |                | 3              | 3              | 2              |                |                |                |                | 41     |     |   |
| 045-050          | 005                    | 126          | 135          | 132          | 153          | 68           | 56           | 104           | 60             | 117            | 155            | 202            | 367            | 271            | 175            | 111            | 78             | 181            | 123            | 41             | 45             | 11    | 2              | 2              |                |                |                |                |                | 2,971          |        |     |   |
| 055-056          | 858                    | 158          | 73           | 49           | 24           | 25           | 24           | 25            | 5              | 20             | 15             | 9              | 6              | 7              | 3              |                |                |                | 2              |                |                |       |                |                |                |                |                |                |                | 1,319          |        |     |   |
| 060              |                        |              |              |              |              |              |              |               |                | 6              | 5              | 3              | 3              | 3              | 4              | 2              | 3              | 3              | 1              | 16             | 8              |       | 1              |                |                |                |                |                |                |                | 62     |     |   |
| 065-069          |                        |              |              |              | 8            | 6            | 3            | 1             | 1              | 3              | 2              | 23             | 17             | 32             | 17             | 16             | 11             | 12             | 7              | 12             | 7              |       | 1              |                | 4              |                |                |                |                |                | 62     |     |   |
| 070-072          | 24                     | 382          | 22           | 22           | 153          | 87           | 143          | 106           | 152            | 405            | 400            | 218            | 112            | 115            | 141            | 48             | 15             | 39             | 37             | 22             | 13             | 2     | 2              |                |                |                |                |                |                | 2,683          |        |     |   |
| 075-083          | 15                     | 10           | 11           | 11           | 10           | 6            | 9            | 8             | 4              | 19             | 23             | 31             | 42             | 8              | 6              | 2              | 5              | 1              | 2              | 2              | 3              | 3     | 1              | 1              |                |                |                |                |                | 244            |        |     |   |
| 100-116          | 22                     | 34           | 42           | 18           | 31           | 40           | 71           | 53            | 31             | 59             | 53             | 49             | 00             | 40             | 00             | 40             | 23             | 28             | 22             | 16             | 13             | 4     | 11             | 3              | 3              |                |                |                |                | 814            |        |     |   |
| 150-163          | 23                     | 44           | 32           | 77           | 154          | 218          | 176          | 327           | 421            | 407            | 244            | 230            | 256            | 244            | 183            | 78             | 117            | 49             | 37             | 44             | 18             | 3     | 5              | 3              | 1              | 7              | 1              | 1              |                | 3,630          |        |     |   |
| 201-214          | 85                     | 87           | 129          | 316          | 452          | 397          | 216          | 285           | 202            | 237            | 171            | 89             | 31             | 48             | 14             | 18             | 7              | 15             | 12             | 1              | 2              | 2     | 1              |                |                |                |                |                |                | 2,817          |        |     |   |
| 291-339          | 5,490                  | 36,068       | 2,963        | 1,372        | 1,058        | 335          | 225          | 264           | 65             | 149            | 102            | 67             | 44             | 30             | 8              | 9              | 7              | 4              | 1              |                | 1              |       |                |                |                |                |                |                |                | 48,264         |        |     |   |
| 340-349          | 16                     | 8            |              |              | 1            | 9            |              |               | 7              |                |                |                |                |                |                |                |                |                |                |                |                |       |                |                |                |                |                |                |                |                | 42     |     |   |
| 355-356          | 203                    | 2,165        | 186          | 100          | 114          | 50           | 24           | 57            | 21             | 58             | 44             | 8              | 4              | 2              | 2              | 1              |                | 9              |                |                |                |       |                |                |                |                |                |                |                | 3,048          |        |     |   |
| 400-425          |                        | 207          | 56           | 241          | 26           | 32           | 23           | 57            | 22             | 28             | 7              | 14             | 1              | 6              | 4              | 2              | 3              | 3              |                |                |                |       |                |                |                |                |                |                |                | 733            |        |     |   |
| 500-510          | 79                     | 98           | 86           | 115          | 181          | 128          | 106          | 136           | 79             | 208            | 218            | 47             | 53             | 37             | 56             | 9              | 7              | 22             | 23             | 15             | 2              | 1     |                |                |                |                |                |                |                | 1,706          |        |     |   |
| 520-522          | 41                     | 134          | 197          | 168          | 230          | 332          | 202          | 389           | 273            | 765            | 713            | 424            | 295            | 432            | 126            | 79             | 39             | 61             | 73             | 19             | 18             | 4     | 5              | 5              |                |                |                |                | 5,028          |                |        |     |   |
| 545-548          |                        |              | 1            |              | 4            | 11           | 6            | 9             | 33             | 26             | 28             | 24             | 11             | 9              | 10             | 6              | 1              | 2              | 7              | 2              | 8              | 1     |                |                |                |                |                |                |                |                | 200    |     |   |
| 555-557          |                        |              |              |              |              |              |              |               |                |                |                |                |                |                |                |                |                |                |                |                |                |       |                |                |                |                |                |                |                |                |        | 795 |   |
| 500-561, n.e.i.  |                        | 18           | 14           | 21           | 100          | 82           | 105          | 74            | 89             | 68             | 62             | 66             | 32             | 12             | 12             | 10             | 6              | 7              | 1              | 1              |                |       |                |                |                |                |                |                |                |                | 21     |     |   |
| 642-656          | 8                      | 79           | 74           | 67           | 202          | 166          | 121          | 198           | 89             | 220            | 207            | 85             | 86             | 135            | 72             | 61             | 32             | 46             | 39             | 12             | 10             | 6     | 4              | 3              | 4              | 7              | 9              |                | 2              | 2,044          |        |     |   |
| 657-665          | 2                      | 2            | 5            | 1            | 10           | 25           | 35           | 29            | 39             | 35             | 52             | 45             | 84             | 85             | 50             | 101            | 10             | 22             | 23             | 19             | 12             | 15    |                |                |                |                |                |                |                | 802            |        |     |   |
| 668-672          | 23                     | 36           | 26           | 86           | 288          | 233          | 141          | 317           | 169            | 308            | 260            | 67             | 110            | 69             | 60             | 33             | 13             | 18             | 1              | 14             | 6              | 5     |                |                |                |                |                |                |                | 2,286          |        |     |   |
| 675-684          | 347                    | 975          | 422          | 326          | 644          | 357          | 368          | 504           | 290            | 828            | 608            | 327            | 292            | 250            | 232            | 150            | 92             | 210            | 55             | 25             | 16             | 6     |                |                |                |                |                |                |                | 7,359          |        |     |   |
| 687-688          | 17                     | 30           | 10           | 18           | 77           | 71           | 61           | 138           | 93             | 197            | 208            | 77             | 24             | 10             | 10             | 5              | 3              | 18             |                |                |                |       |                |                |                |                |                |                |                |                | 1,079  |     |   |
| 691-698          | 7                      | 23           | 14           | 51           | 96           | 41           | 39           | 47            | 30             | 57             | 52             | 39             | 25             | 17             | 11             | 10             | 3              | 5              | 3              |                |                |       |                |                |                |                |                |                |                |                | 576    |     |   |
| 703-708          |                        | 1            | 2            | 2            | 51           | 24           | 6            | 15            | 5              | 16             | 11             | 5              | 3              | 2              | 2              | 2              | 2              | 12             | 3              | 1              |                |       |                |                |                |                |                |                |                |                | 167    |     |   |
| 721              | 1                      | 13           | 18           | 48           | 207          | 89           | 62           | 56            | 9              | 10             | 17             | 9              | 7              | 1              |                |                |                |                |                |                |                |       |                |                |                |                |                |                |                |                | 549    |     |   |
| 739              | 104                    | 4            | 14           | 11           | 333          | 107          | 12           | 9             | 3              | 3              |                |                |                |                |                |                |                |                |                |                |                |       |                |                |                |                |                |                |                |                | 601    |     |   |
| 754              | 1                      | 33           | 14           | 11           | 143          | 47           | 42           | 18            | 3              | 14             | 8              | 2              | 3              | 2              |                |                |                |                |                |                |                |       |                |                |                |                |                |                |                |                | 343    |     |   |
| 757-763          | 12                     | 202          | 126          | 60           | 79           | 61           | 88           | 85            | 83             | 145            | 127            | 120            | 78             | 83             | 26             | 15             | 12             | 30             | 17             | 4              | 3              | 8     | 3              | 3              | 5              | 8              | 1              | 1              |                | 1,485          |        |     |   |
| 766-768          | 33                     | 142          | 66           | 151          | 309          | 137          | 81           | 179           | 110            | 131            | 88             | 66             | 107            | 33             | 32             | 26             | 10             | 12             | 6              | 1              | 4              | 3     |                |                |                |                |                |                |                | 1,729          |        |     |   |
| 600-768, n.e.i.  | 17                     | 51           | 11           | 37           | 96           | 28           | 21           | 31            | 17             | 26             | 16             | 19             | 7              | 11             | 8              | 5              | 10             | 5              | 2              |                |                |       |                |                |                |                |                |                |                |                | 418    |     |   |
| 774-785          | 1,420                  | 4,559        | 947          | 2,476        | 6,164        | 1,666        | 807          | 780           | 250            | 308            | 303            | 111            | 78             | 50             | 19             | 9              | 5              | 10             | 4              | 12             | 5              |       |                |                |                |                |                |                |                | 1              | 19,984 |     |   |
| 800-802          | 6                      | 4            | 5            | 2            | 22           | 99           | 202          | 69            | 65             | 342            | 254            | 223            | 199            | 212            | 861            | 351            | 151            | 141            | 67             | 24             | 22             | 6     | 11             | 2              |                |                |                |                |                | 2              | 3,351  |     |   |
| 805-816          | 113                    | 319          | 242          | 261          | 638          | 386          | 236          | 336           | 171            | 309            | 142            | 83             | 73             | 34             | 25             | 17             | 6              | 11             | 4              | 6              | 1              | 2     |                |                |                |                |                |                |                | 1              | 3,408  |     |   |
| 820-821          | 18                     | 51           | 29           | 78           | 278          | 116          | 91           | 77            | 41             | 29             | 19             | 17             | 7              | 3              | 4              | 7              | 2              | 2              | 1              | 1              | 1              |       |                |                |                |                |                |                |                |                | 872    |     |   |
| 825-850          | 7                      | 31           | 20           | 30           | 75           | 56           | 12           | 12            | 17             | 15             | 5              | 3              | 3              | 3              | 3              | 4              | 3              | 1              | 1              | 2              |                |       |                |                |                |                |                |                |                |                | 302    |     |   |
| 851              | 294                    | 230          | 90           | 145          | 134          | 99           | 52           | 31            | 59             | 123            | 157            | 136            | 124            | 78             | 24             | 16             | 9              | 9              | 14             | 5              | 2              |       |                |                |                |                |                |                |                |                | 1,831  |     |   |
| Total PNG Males  | 9,558                  | 46,339       | 6,074        | 6,530        | 12,569       | 5,640        | 3,869        | 4,831         | 2,807          | 5,705          | 4,947          | 2,949          | 2,633          | 2,491          | 2,341          | 1,362          | 660            | 1,078          | 621            | 320            | 254            | 106   | 65             | 41             | 20             | 37             | 23             | 9              | 16             | 123,895        |        |     |   |

Note: Figures for 1971 and 1972 are not yet available.

## Part B—Private Sector by Urban Centre

| Urban Centre          | Weekly Wage Group (\$) |              |              |              |              |              |              |               |                |                |                |                |                |                |                |                |                |                |                |                | Total |                |                |                |                |                |                |                |                |                |        |       |    |
|-----------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|-------|----|
|                       | Up to 3.50             | 3.51 to 4.50 | 4.51 to 5.50 | 5.51 to 6.50 | 6.51 to 7.50 | 7.51 to 8.50 | 8.51 to 9.50 | 9.51 to 10.50 | 10.51 to 11.50 | 11.51 to 13.50 | 13.51 to 15.50 | 15.51 to 17.50 | 17.51 to 19.50 | 19.51 to 21.50 | 21.51 to 23.50 | 23.51 to 25.50 | 25.51 to 27.50 | 27.51 to 31.50 | 31.51 to 35.50 | 35.51 to 39.50 |       | 39.51 to 43.50 | 43.51 to 47.50 | 47.51 to 51.50 | 51.51 to 55.50 | 55.51 to 59.50 | 59.51 to 67.50 | 67.51 to 75.50 | 75.51 to 83.50 | 83.51 and over |        |       |    |
| Bulolo ..             | 1                      | 261          | 72           | 53           | 50           | 19           | 2            | 42            | 1              | 18             | 8              | 2              | 4              | 1              | ..             | ..             | ..             | ..             | ..             | ..             | ..    | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..     | 534   |    |
| Daru ..               | 1                      | 1            | 8            | 5            | 13           | 9            | 3            | 6             | 3              | 2              | 1              | 2              | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..    | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..     | 55    |    |
| Goroka ..             | 192                    | 119          | 66           | 159          | 251          | 144          | 57           | 73            | 75             | 91             | 85             | 40             | 21             | 28             | 5              | 14             | ..             | ..             | ..             | ..             | ..    | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..     | 1,453 |    |
| Kavieng ..            | 52                     | 33           | 65           | 137          | 39           | 11           | 25           | 27            | 7              | 39             | 13             | 6              | 7              | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..    | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..     | 469   |    |
| Kieta ..              | 60                     | 561          | 31           | 104          | 63           | 41           | 143          | 190           | 25             | 154            | 76             | 36             | 38             | 88             | 63             | 21             | 21             | 36             | 66             | 14             | 3     | 5              | 3              | 4              | 4              | 4              | 1              | 1              | 1              | ..             | 1,856  |       |    |
| Lae ..                | 64                     | 46           | 100          | 500          | 1,307        | 592          | 496          | 522           | 257            | 353            | 312            | 134            | 131            | 105            | 68             | 72             | 26             | 46             | 27             | 18             | 14    | 3              | 3              | 5              | ..             | 2              | 2              | 1              | 1              | ..             | 5,207  |       |    |
| Lorengau ..           | 11                     | 1            | 4            | 53           | 33           | 28           | 11           | 15            | 4              | 10             | 11             | 1              | 1              | 1              | ..             | ..             | ..             | ..             | ..             | ..             | ..    | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | 184    |       |    |
| Madang ..             | 27                     | 24           | 45           | 87           | 778          | 327          | 176          | 131           | 75             | 135            | 77             | 30             | 15             | 27             | 19             | 11             | 6              | 20             | 5              | 2              | 3     | 1              | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | 2,023  |       |    |
| Mount ..              | ..                     | ..           | ..           | ..           | ..           | ..           | ..           | ..            | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..    | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..     | ..    |    |
| Hagen ..              | 25                     | 58           | 63           | 139          | 206          | 87           | 60           | 96            | 50             | 96             | 65             | 21             | 9              | 40             | 6              | 8              | 2              | 4              | 4              | 1              | 1     | 1              | 1              | 1              | ..             | ..             | ..             | ..             | ..             | ..             | ..     | 1,043 |    |
| Popondetta ..         | 24                     | 8            | 12           | 30           | 60           | 60           | 19           | 48            | 18             | 22             | 17             | 7              | 8              | 4              | 10             | 2              | 1              | 1              | 1              | 1              | ..    | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..     | 354   |    |
| Port ..               | ..                     | ..           | ..           | ..           | ..           | ..           | ..           | ..            | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..    | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..     | ..    | .. |
| Moresby ..            | 57                     | 142          | 97           | 313          | 2,038        | 1,141        | 729          | 1,052         | 452            | 1,023          | 797            | 384            | 269            | 343            | 189            | 161            | 88             | 119            | 80             | 38             | 37    | 13             | 13             | 2              | 1              | 7              | 1              | 1              | ..             | ..             | 9,587  |       |    |
| Rabaul ..             | 35                     | 42           | 32           | 198          | 938          | 506          | 251          | 280           | 111            | 222            | 183            | 72             | 55             | 69             | 15             | 22             | 14             | 20             | 8              | 6              | 3     | 5              | 1              | 1              | 1              | ..             | ..             | ..             | ..             | ..             | ..     | 3,090 |    |
| Samarai ..            | 2                      | 14           | 11           | 45           | 117          | 76           | 31           | 77            | 24             | 30             | 19             | 10             | 9              | 11             | 8              | 10             | 4              | 2              | 3              | 4              | 4     | 1              | 1              | 1              | ..             | ..             | ..             | ..             | ..             | ..             | ..     | 508   |    |
| Wewak ..              | 5                      | 6            | 9            | 61           | 193          | 173          | 69           | 103           | 75             | 89             | 38             | 11             | 7              | 11             | 5              | 5              | ..             | 4              | 2              | 1              | 2     | ..             | 1              | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..     | 870   |    |
| Total ..              | 555                    | 1,316        | 615          | 1,884        | 6,086        | 3,214        | 2,072        | 2,662         | 1,177          | 2,284          | 1,702          | 756            | 574            | 728            | 391            | 328            | 163            | 262            | 206            | 89             | 69    | 29             | 27             | 12             | 6              | 15             | 5              | 4              | 2              | ..             | 27,233 |       |    |
| Total Urban Workforce | 821                    | 3,059        | 720          | 2,774        | 9,326        | 3,904        | 2,797        | 3,349         | 1,925          | 3,907          | 3,308          | 1,803          | 1,645          | 1,642          | 1,536          | 899            | 373            | 594            | 380            | 204            | 162   | 77             | 43             | 31             | 12             | 24             | 11             | 6              | 11             | ..             | 45,343 |       |    |

SUMMARY OF CLASSIFICATION OF OCCUPATIONS FOR USE WITH 'CLASSIFICATION AND CLASSIFIED LIST OF OCCUPATIONS' TABLES SUPPLIED BY THE  
COMMONWEALTH BUREAU OF CENSUS AND STATISTICS, CANBERRA, JUNE 1966 EDITION AMENDED FOR PAPUA NEW GUINEA

|   |         |   |         |
|---|---------|---|---------|
| <i>Professional, Technical and Related Workers</i> .. .. .      | 001-083 | <i>Workers in Transport and Communications</i> .. .. .  | 500-561 |
| Metallurgists .. .. .   | 006     | Deck and Engine Room Hands .. .. .  | 500     |
| Medical Practitioners .. .. .                                   | 025     | Motor Truck and Van Drivers .. .. .   | 522     |
| Dentists .. .. .  | 026     | Messengers .. .. .  | 577     |
| Nurses, including trainees .. .. .                              | 030     | Workers in Transport and Communications, n.e.i.* .. .. .                                      | 500-561 |
| Teachers—Primary and Secondary—Government .. .. .               | 047     |   |         |
| Non-Government .. .. .  | 048     | <i>Tradesmen and Production—Process Workers</i> .. .. .                                       | 600-768 |
| Other Teachers .. .. .  | 045-050 | Motor Vehicle Mechanics .. .. .   | 646     |
| Clergy and Related Members of Religious Orders .. .. .          | 055-056 | Sheetmetal Workers, and Panel Beaters .. .. .   | 648     |
| Law Professionals .. .. .                                       | 060     | Plumber and Pipe Fitters .. .. .  | 649     |
| Artists, Entertainers, Writers and Related Workers .. .. .      | 065-068 | Welders and Flame Cutters .. .. .   | 650     |
| Draftsmen and Tracers .. .. .                                   | 070     | Tool-Makers, Machinists and Related Workers, n.e.i.* .. .. .                                  | 642-656 |
| Technicians and Technical Assistants .. .. .                    | 071     | Electricians and Related Electric and Electronic Workers .. .. .                              | 659-665 |
| Other Professional .. .. .                                      | 075-083 | Tradesmen's Assistants .. .. .  | 671     |
|   |         | Metal Makers, Metal Workers and Electrical Production—Process<br>Workers .. .. .              | 668-672 |
| <i>Administrative, Executive and Managerial Workers</i> .. .. . | 100-117 | Carpenters, Joiners .. .. .   | 675     |
| Administrative and Executive Officers—Government .. .. .        | 100-107 | Woodworking Machinists, Cabinet Makers and Related Workers<br>n.e.i.* .. .. .                 | 675-684 |
| Administrative and Executive Officers—Private Sector .. .. .    | 110-117 | Painters and Decorators .. .. .   | 687-688 |
|   |         | Bricklayers, Plasterers and Construction Workers, n.e.i.* .. .. .                             | 691-698 |
| <i>Clerical Workers</i> .. .. .                                 |         | Bakers and Pastry-Cooks .. .. .   | 721     |
| Book-keepers, Cashiers, Stenographers and Typists .. .. .       | 150-155 | Tobacco Preparers and Tobacco Product Makers .. .. .  | 739     |
| Clerical Workers—Government .. .. .                             | 162     | Packers, Wrappers and Labellers .. .. .   | 754     |
| Clerical Workers—Non-Government .. .. .                         | 163     | Freight Handlers, including Waterside Workers .. .. .   | 766-768 |
|   |         | Tradesmen and Production—Process Workers, n.e.i.* .. .. .                                     | 600-768 |
| <i>Sales Workers</i> .. .. .                                    | 200-217 |   |         |
| Shop Assistants .. .. .   | 210-214 | <i>Labourers</i> .. .. .  | 774-785 |
| Other Sales Workers, n.e.i.* .. .. .                            | 200-217 |   |         |
|   |         | <i>Service, Sport and Recreation Workers</i> .. .. .  | 800-851 |
| <i>Farm Workers</i> .. .. .                                     | 292-339 | Fire Brigademen .. .. .   | 800     |
| Cocoa Plantation Workers .. .. .                                | 330     | Policemen .. .. .   | 801     |
| Coconut Plantation Workers .. .. .                              | 331     | Other Protective Workers .. .. .  | 803     |
| Cocoa and Coconut (interplanted) Plantation Workers .. .. .     | 332     | Cooks .. .. .   | 807     |
| Coffee Plantation Workers .. .. .                               | 333     | Housekeepers, Cooks and Maids, n.e.i.* .. .. .  | 805-811 |
| Rubber Plantation Workers .. .. .                               | 337     | Waiters and Bartenders .. .. .  | 815-816 |
| Tea Plantation Workers .. .. .                                  | 338     | Building Caretakers and Cleaners .. .. .  | 820-821 |
| Other Farm Workers, n.e.i.* .. .. .                             | 292-339 | Barbers and Hairdressers .. .. .  | 825     |
|   |         | Launderers .. .. .  | 830     |
| <i>Fishermen and Related Workers</i> .. .. .                    | 345-349 | Service, Sport and Recreation Workers, n.e.i.* .. .. .  | 835-850 |
|   |         | Hospital and Other Medical Attendants, including Nursing Aids<br>and Assistant Nurses .. .. . | 851     |
| <i>Timber Getters and Other Forestry Workers</i> .. .. .        | 355-356 |   |         |
|   |         |   |         |
| <i>Miners, Quarrymen and Related Workers</i> .. .. .            | 400-425 |   |         |

\* n.e.i. means not elsewhere indicated.

APPENDIX XVII—continued

4. LABOUR INSPECTIONS AND WORKERS INTERVIEWED CLASSIFIED BY INDUSTRY DURING  
YEAR ENDED 30 JUNE 1972

| Industry                             | Number of inspections | Number of workers interviewed |
|--------------------------------------|-----------------------|-------------------------------|
| Primary production—                  |                       |                               |
| Copra and cocoa .. .. .              | 331                   | 15,923                        |
| Rubber .. .. .                       | 22                    | 3,024                         |
| Coffee .. .. .                       | 69                    | 3,385                         |
| Tea .. .. .                          | 4                     | 872                           |
| Pastoral .. .. .                     | 13                    | 598                           |
| Other agriculture .. .. .            | 62                    | 1,180                         |
| Forestry .. .. .                     | 23                    | 1,805                         |
| Mining and quarrying—                |                       |                               |
| Gold mining .. .. .                  | 11                    | 379                           |
| Oil mining .. .. .                   | 3                     | 91                            |
| Other mining .. .. .                 | 4                     | 56                            |
| Quarrying .. .. .                    | 6                     | 54                            |
| General—                             |                       |                               |
| Manufacturing .. .. .                | 157                   | 6,068                         |
| Building and construction .. .. .    | 138                   | 5,514                         |
| Transport and storage .. .. .        | 183                   | 5,006                         |
| Communications .. .. .               | 41                    | 481                           |
| Commerce .. .. .                     | 979                   | 9,520                         |
| Personal service .. .. .             | 4                     | 39                            |
| Hotels, amusements and cafes .. .. . | 76                    | 1,351                         |
| Professional activities—             |                       |                               |
| Religion and social welfare .. .. .  | 79                    | 1,487                         |
| Health and hospitals .. .. .         | 68                    | 1,576                         |
| Education .. .. .                    | 89                    | 806                           |
| Others .. .. .                       | 330                   | 9,371                         |
| <b>Total .. .. .</b>                 | <b>2,692</b>          | <b>68,586</b>                 |



5. DETAILS OF REPORTED ACCIDENTS DURING YEAR ENDED 30 JUNE 1972, INCLUDING THOSE AWAITING SETTLEMENT AT 1 JULY 1971:  
CLASSIFIED ACCORDING TO PRINCIPAL INDUSTRY

| Industry                              | Cause of accident                                  | Outstanding at 1 July 1971 |           | Reported during year ended 30 June 1972 |           | Total | Degree of disability |            |                 |                     |                     | Compensation claim result |                   |                           |                     | Not yet final |           |
|---------------------------------------|--|----------------------------|-----------|---|-----------|-------|----------------------|------------|-----------------|---------------------|---------------------|---------------------------|-------------------|---------------------------|---------------------|---------------|-----------|
|                                       |  | Fatal                      | Non-fatal | Fatal                                   | Non-fatal |       | Fatal                | Perman-ent | Part-perman-ent | Tempo-rary with pay | Not yet deter-mined | Number of cases           | Total amount paid | Wages and emolu-ment paid | Non-com-pensat-able | Fatal         | Non-fatal |
|                                       |  |                            |           |   |           |       |                      |            |                 |                     |                     |                           |                   |                           |                     |               |           |
| Primary production<br>Copra and cocoa | Injured by handtool ..                             | ..                         | 57        | ..                                      | 31        | 88    | ..                   | ..         | 29              | 5                   | 54                  | 28                        | 7,587.33          | 6                         | 1                   | ..            | 53        |
|                                       | Vehicle accident (in-cluding tractor) ..           | 3                          | 8         | ..                                      | 4         | 15    | 3                    | ..         | 1               | 1                   | 10                  | 2                         | 655.50            | 1                         | ..                  | 2             | 10        |
|                                       | Fall (including fall from vehicle) ..              | 1                          | 6         | ..                                      | 7         | 14    | 1                    | ..         | 1               | 6                   | 6                   | 1                         | 810.00            | 6                         | ..                  | 1             | 6         |
|                                       | Falling object (includ-ing falling tree) ..        | 4                          | 6         | 1                                       | 7         | 18    | 5                    | ..         | 2               | 2                   | 9                   | 5                         | 1,148.89          | 2                         | ..                  | 2             | 9         |
|                                       | Injured by machinery                               | ..                         | 4         | ..                                      | 4         | 8     | ..                   | ..         | 4               | 1                   | 3                   | 4                         | 1,344.60          | 1                         | ..                  | ..            | 3         |
|                                       | Flying object ..                                   | ..                         | 7         | ..                                      | 3         | 10    | ..                   | ..         | 3               | ..                  | 7                   | 3                         | 2,887.92          | ..                        | ..                  | ..            | 7         |
|                                       | Burns ..   | ..                         | ..        | ..                                      | 1         | 1     | ..                   | ..         | ..              | ..                  | 1                   | ..                        | ..                | ..                        | ..                  | ..            | 1         |
|                                       | Drowning ..  | 10                         | ..        | 4                                       | ..        | 14    | 14                   | ..         | ..              | ..                  | ..                  | 2                         | 538.30            | ..                        | 3                   | 9             | ..        |
|                                       | Electrocution (includ-ing struck by light-ning) .. | 1                          | ..        | 2                                       | ..        | 3     | 3                    | ..         | ..              | ..                  | ..                  | 1                         | 2,700.00          | ..                        | 1                   | 1             | ..        |
|                                       | Loading cargo ..                                   | ..                         | 5         | ..                                      | ..        | 5     | ..                   | ..         | ..              | 3                   | 2                   | ..                        | ..                | 3                         | ..                  | ..            | 2         |
| Rubber                                | Falling object (includ-ing falling tree) ..        | 1                          | 2         | 1                                       | 2         | 6     | 2                    | ..         | ..              | 1                   | 3                   | ..                        | ..                | 1                         | 1                   | 1             | 3         |
|                                       | Tractor accident ..                                | ..                         | ..        | ..                                      | 2         | 2     | ..                   | ..         | ..              | 1                   | 1                   | ..                        | ..                | 1                         | ..                  | ..            | 1         |
|                                       | Snake bite ..                                      | ..                         | 1         | ..                                      | 2         | 3     | ..                   | ..         | ..              | 3                   | ..                  | ..                        | ..                | 3                         | ..                  | ..            | ..        |
|                                       | Flying object ..                                   | ..                         | 1         | ..                                      | 1         | 2     | ..                   | ..         | ..              | ..                  | 2                   | ..                        | ..                | ..                        | ..                  | ..            | 2         |
|                                       | Injured by machinery                               | ..                         | 3         | ..                                      | 2         | 5     | ..                   | ..         | 1               | 1                   | 3                   | 1                         | 1,552.50          | 1                         | ..                  | ..            | 3         |
|                                       | Injured by handtool ..                             | ..                         | 15        | ..                                      | ..        | 15    | ..                   | ..         | 8               | 2                   | 5                   | 7                         | 1,278.67          | 2                         | 1                   | ..            | 5         |
|                                       | Drowning ..  | 1                          | ..        | ..                                      | ..        | 1     | 1                    | ..         | ..              | ..                  | ..                  | ..                        | ..                | ..                        | 1                   | ..            | ..        |
|                                       | Vehicle accident ..                                | 1                          | 1         | ..                                      | ..        | 2     | 1                    | ..         | ..              | ..                  | 1                   | 1                         | 540.00            | ..                        | ..                  | ..            | 1         |
|                                       | Fall ..  | ..                         | 6         | 1                                       | ..        | 7     | 1                    | ..         | ..              | 2                   | 4                   | ..                        | ..                | 2                         | ..                  | 1             | 4         |
|                                       | Electrocution ..                                   | 1                          | ..        | ..                                      | ..        | 1     | 1                    | ..         | ..              | ..                  | ..                  | ..                        | ..                | ..                        | ..                  | 1             | ..        |
| Coffee ..                             | Injured by handtool ..                             | ..                         | 6         | ..                                      | 4         | 10    | ..                   | ..         | 5               | ..                  | 5                   | 5                         | 2,601.91          | ..                        | ..                  | ..            | 5         |
|                                       | Fall (including fall from vehicle) ..              | ..                         | 4         | ..                                      | 3         | 7     | ..                   | ..         | 2               | 1                   | 4                   | 2                         | 684.99            | 1                         | ..                  | ..            | 4         |
|                                       | Vehicle accident (in-cluding tractor) ..           | 3                          | 2         | 4                                       | 10        | 19    | 7                    | ..         | ..              | 3                   | 9                   | ..                        | ..                | 3                         | ..                  | 6             | 10        |
|                                       | Drowning ..  | 2                          | ..        | 1                                       | ..        | 3     | 3                    | ..         | ..              | ..                  | ..                  | ..                        | ..                | ..                        | ..                  | 3             | ..        |

5. DETAILS OF REPORTED ACCIDENTS DURING YEAR ENDED 30 JUNE 1972, INCLUDING THOSE AWAITING SETTLEMENT AT 1 JULY 1971:  
CLASSIFIED ACCORDING TO PRINCIPAL INDUSTRY—continued

| Industry                | Cause of accident                             | Outstanding at 1 July 1971 |           | Reported during 1 July 1971—30 June 1972 |           | Total | Degree of disability |                |                        |                               |                               | Compensation claim result |                         |  |                                 | Not yet final |               |
|-------------------------|---|----------------------------|-----------|--|-----------|-------|----------------------|----------------|------------------------|-------------------------------|-------------------------------|---------------------------|-------------------------|--|---------------------------------|---------------|---------------|
|                         |   | Fatal                      | Non-fatal | Fatal                                    | Non-fatal |       | Fatal                | Per-<br>manent | Part<br>per-<br>manent | Tempo-<br>rary<br>with<br>pay | Not<br>yet<br>deter-<br>mined | Number<br>of<br>cases     | Total<br>amount<br>paid | Wages<br>and<br>emolu-<br>ment<br>paid | Non-<br>com-<br>pensat-<br>able | Fatal         | Non-<br>fatal |
| <i>Coffee—continued</i> |   |                            |           |  |           |       |                      |                |                        |                               |                               |                           |                         |  |                                 |               |               |
|                         | Injured by machinery                          | ..                         | 8         | ..                                       | 4         | 12    | ..                   | ..             | 8                      | 2                             | 2                             | 8                         | \$ 2,650.50             | 2                                      | ..                              | ..            | 2             |
|                         | Falling object                                | ..                         | 1         | ..                                       | 2         | 3     | ..                   | ..             | 1                      | 1                             | 1                             | 1                         | 35.10                   | 1                                      | ..                              | ..            | 1             |
|                         | Electrocution (including struck by lightning) | ..                         | 1         | ..                                       | 1         | 2     | 2                    | ..             | ..                     | ..                            | ..                            | ..                        | ..                      | ..                                     | ..                              | ..            | ..            |
|                         | Flying object                                 | ..                         | 1         | ..                                       | ..        | 1     | ..                   | ..             | ..                     | ..                            | 1                             | ..                        | ..                      | ..                                     | ..                              | 2             | ..            |
|                         | Burns   | ..                         | 1         | ..                                       | 1         | 2     | ..                   | ..             | 1                      | ..                            | 1                             | 1                         | 1,393.20                | ..                                     | ..                              | ..            | 1             |
| Pastoral ..             | Drowning                                      | ..                         | ..        | ..                                       | 1         | 1     | 1                    | ..             | ..                     | ..                            | ..                            | ..                        | ..                      | ..                                     | ..                              | 1             | ..            |
|                         | Explosion                                     | ..                         | 1         | ..                                       | ..        | 1     | 1                    | ..             | ..                     | ..                            | ..                            | ..                        | ..                      | ..                                     | ..                              | 1             | ..            |
|                         | Injured by machinery                          | ..                         | 2         | ..                                       | ..        | 2     | ..                   | ..             | 1                      | ..                            | 1                             | 1                         | 270.00                  | ..                                     | ..                              | ..            | 1             |
|                         | Falling tree                                  | ..                         | 2         | ..                                       | ..        | 2     | ..                   | ..             | ..                     | 1                             | 1                             | ..                        | 1                       | ..                                     | ..                              | ..            | 1             |
|                         | Vehicle accident                              | ..                         | 1         | ..                                       | ..        | 1     | ..                   | ..             | ..                     | 1                             | ..                            | ..                        | 1                       | ..                                     | ..                              | ..            | ..            |
|                         | Injured by handtool                           | ..                         | 1         | ..                                       | ..        | 1     | ..                   | ..             | ..                     | ..                            | 1                             | ..                        | ..                      | 1                                      | ..                              | ..            | ..            |
| Other agriculture ..    | Fall  | ..                         | 1         | ..                                       | 2         | 3     | 1                    | ..             | ..                     | 1                             | 1                             | 1                         | 200.00                  | 1                                      | ..                              | ..            | 1             |
|                         | Falling object                                | ..                         | 1         | ..                                       | ..        | 1     | 1                    | ..             | ..                     | ..                            | ..                            | ..                        | ..                      | ..                                     | 1                               | ..            | ..            |
|                         | Tractor accident (including other vehicles)   | ..                         | ..        | ..                                       | 1         | 3     | 4                    | 1              | ..                     | ..                            | 3                             | ..                        | ..                      | ..                                     | ..                              | 1             | 3             |
|                         | Injured by machinery                          | ..                         | 1         | ..                                       | 1         | 2     | ..                   | ..             | 1                      | ..                            | 1                             | 1                         | 270.00                  | ..                                     | ..                              | ..            | 1             |
|                         | Injured by handtool                           | ..                         | 3         | ..                                       | 1         | 4     | ..                   | ..             | ..                     | 1                             | 3                             | ..                        | 1                       | ..                                     | ..                              | ..            | 3             |
|                         | Pneumonia                                     | ..                         | ..        | ..                                       | 1         | 1     | 1                    | ..             | ..                     | ..                            | ..                            | ..                        | ..                      | ..                                     | ..                              | 1             | ..            |
| Forestry ..             | Flying object                                 | ..                         | 2         | ..                                       | ..        | 2     | ..                   | ..             | 2                      | ..                            | ..                            | 2                         | 3,328.80                | ..                                     | ..                              | ..            | ..            |
|                         | Fall  | ..                         | ..        | ..                                       | 1         | 1     | ..                   | ..             | ..                     | ..                            | 1                             | ..                        | ..                      | ..                                     | ..                              | ..            | 1             |
|                         | Vehicle accident (including tractor)          | ..                         | 2         | ..                                       | 1         | 6     | 3                    | ..             | ..                     | 1                             | 2                             | 1                         | 270.00                  | 1                                      | ..                              | 2             | 2             |
|                         | Falling tree                                  | ..                         | ..        | ..                                       | ..        | ..    | ..                   | ..             | ..                     | ..                            | ..                            | ..                        | ..                      | ..                                     | ..                              | ..            | ..            |
|                         | Injured by handtool                           | ..                         | 1         | ..                                       | ..        | 1     | ..                   | ..             | 1                      | ..                            | ..                            | 1                         | 162.00                  | ..                                     | ..                              | ..            | ..            |
|                         | Injured by machinery                          | ..                         | 1         | ..                                       | 3         | 4     | ..                   | ..             | 1                      | ..                            | 3                             | 1                         | 189.00                  | ..                                     | ..                              | ..            | 3             |
|                         | Falling object                                | ..                         | ..        | ..                                       | 2         | 2     | ..                   | ..             | ..                     | 1                             | 1                             | ..                        | ..                      | 1                                      | ..                              | ..            | 1             |
| Gold mining ..          | Flying object                                 | ..                         | 1         | ..                                       | ..        | 1     | ..                   | ..             | ..                     | ..                            | 1                             | ..                        | ..                      | ..                                     | ..                              | ..            | 1             |
|                         | Vehicle accident                              | ..                         | 1         | ..                                       | ..        | 1     | ..                   | ..             | ..                     | ..                            | 1                             | ..                        | ..                      | ..                                     | ..                              | ..            | 1             |
| Oil mining ..           | Injured by handtool                           | ..                         | ..        | ..                                       | 1         | 1     | ..                   | ..             | ..                     | ..                            | 1                             | ..                        | ..                      | ..                                     | ..                              | ..            | 1             |
| Other mining ..         | Closing door                                  | ..                         | ..        | ..                                       | 1         | 1     | ..                   | ..             | ..                     | 1                             | ..                            | ..                        | 1                       | ..                                     | ..                              | ..            | ..            |
|                         | Flying object                                 | ..                         | 2         | ..                                       | 1         | 4     | 1                    | ..             | ..                     | 1                             | 1                             | 1                         | 464.40                  | 1                                      | ..                              | ..            | 1             |

|                           |  |    |    |    |    |    |    |    |    |    |    |    |           |    |    |    |
|---------------------------|--|----|----|----|----|----|----|----|----|----|----|----|-----------|----|----|----|
|                           | Fall (including fall from vehicle) ..      | 1  | 3  | 1  | 2  | 7  | 2  | .. | .. | 1  | 4  | .. | 1         | .. | 2  | 4  |
|                           | Injured by machinery ..                    | .. | 2  | .. | 6  | 8  | .. | .. | 3  | 1  | 4  | 3  | 2,128.70  | 1  | .. | 4  |
|                           | Injured by handtool ..                     | .. | 2  | .. | 1  | 3  | .. | .. | .. | 1  | 2  | .. | 1         | .. | 1  | 2  |
|                           | Explosion (including burns) ..             | 1  | 2  | .. | .. | 3  | 1  | .. | .. | .. | 2  | .. | ..        | .. | 1  | 2  |
|                           | Vehicle accident ..                        | 2  | .. | .. | .. | 2  | 2  | .. | .. | .. | .. | .. | ..        | .. | 2  | .. |
|                           | Falling object (including falling tree) .. | 5  | 4  | .. | .. | 9  | 5  | .. | 2  | 1  | 1  | 4  | 6,284.48  | 1  | .. | 1  |
| Quarrying                 | Cargo handling ..                          | .. | 1  | .. | .. | 1  | .. | .. | .. | .. | 1  | .. | ..        | .. | 1  | .. |
|                           | Vehicle accident ..                        | 1  | .. | .. | .. | 1  | 1  | .. | .. | .. | .. | .. | ..        | .. | .. | 1  |
|                           | Fall ..                                    | .. | 1  | .. | .. | 1  | .. | .. | .. | .. | 1  | .. | ..        | .. | .. | 1  |
| Manufacturing             | Falling object (including falling tree) .. | 1  | 17 | 1  | 13 | 32 | 2  | .. | 3  | 13 | 14 | 4  | 3,212.54  | 13 | .. | 14 |
|                           | Injured by machinery ..                    | .. | 27 | .. | 27 | 54 | .. | .. | 24 | 7  | 23 | 24 | 8,344.14  | 7  | .. | 23 |
|                           | Fall (including fall from vehicle) ..      | .. | 12 | 1  | 8  | 21 | 1  | .. | 2  | 10 | 8  | 2  | 225.25    | 10 | .. | 8  |
|                           | Injured by handtool ..                     | .. | 6  | .. | 7  | 13 | .. | .. | 3  | 5  | 5  | 3  | 487.34    | 5  | .. | 5  |
|                           | Flying object ..                           | .. | 9  | 1  | 8  | 18 | 1  | .. | 2  | 4  | 11 | 2  | 1,323.00  | 4  | .. | 11 |
|                           | Explosion ..                               | .. | .. | 1  | .. | 1  | 1  | .. | .. | .. | .. | .. | ..        | .. | 1  | .. |
|                           | Loading cargo ..                           | .. | .. | .. | 1  | 1  | .. | .. | 1  | .. | .. | 1  | 216.00    | .. | .. | .. |
|                           | Drowning ..                                | 2  | .. | .. | .. | 2  | .. | .. | .. | .. | .. | .. | ..        | 1  | .. | .. |
|                           | Electrocution ..                           | 1  | .. | .. | .. | 1  | 1  | .. | .. | .. | .. | .. | ..        | .. | 1  | .. |
|                           | Aircraft accident ..                       | 1  | .. | .. | .. | 1  | 1  | .. | .. | .. | .. | .. | ..        | .. | 1  | .. |
|                           | Burns ..                                   | .. | 3  | .. | 1  | 4  | .. | .. | .. | .. | 4  | .. | ..        | .. | .. | 4  |
|                           | Vehicle accident ..                        | 2  | 1  | 7  | 1  | 11 | 9  | .. | 1  | .. | 1  | 2  | 1,584.00  | 1  | 7  | 7  |
| Building and construction | Flying object ..                           | .. | 11 | .. | 4  | 15 | .. | .. | 4  | 4  | 7  | 4  | 3,126.00  | 4  | .. | 7  |
|                           | Injured by handtool ..                     | .. | 7  | .. | 19 | 26 | .. | .. | 5  | 11 | 10 | 5  | 1,344.50  | 11 | .. | 10 |
|                           | Fall (including fall from vehicle) ..      | 1  | 18 | 1  | 20 | 40 | 2  | .. | 3  | 13 | 22 | 3  | 512.36    | 13 | .. | 22 |
|                           | Vehicle accident ..                        | 8  | 10 | 9  | 3  | 30 | 17 | .. | 4  | 4  | 5  | 5  | 10,343.95 | 4  | 3  | 13 |
|                           | Closing door ..                            | .. | 2  | .. | 1  | 3  | .. | .. | 1  | 1  | 1  | 1  | 840.00    | 1  | .. | 1  |
|                           | Falling object (including falling tree) .. | .. | 18 | 1  | 24 | 43 | 1  | .. | 11 | 5  | 26 | 11 | 4,868.90  | 5  | .. | 26 |
|                           | Injured by machinery ..                    | .. | 26 | .. | 20 | 46 | .. | .. | 18 | 6  | 22 | 18 | 16,868.24 | 6  | .. | 22 |
|                           | Drowning ..                                | 2  | .. | 1  | .. | 3  | 3  | .. | .. | .. | .. | .. | ..        | .. | 3  | .. |
|                           | Burns ..                                   | .. | 5  | .. | 2  | 7  | .. | .. | .. | 1  | 6  | .. | ..        | 1  | .. | 6  |
|                           | Loading cargo ..                           | .. | 1  | .. | 1  | 2  | .. | .. | .. | .. | 2  | .. | ..        | .. | .. | 2  |
|                           | Snake bite ..                              | .. | 1  | .. | .. | 1  | .. | .. | .. | 1  | 1  | .. | ..        | .. | .. | 1  |
|                           | Explosion ..                               | .. | 1  | .. | .. | 1  | .. | .. | .. | 1  | .. | .. | ..        | 1  | .. | .. |
| Transport and storage     | Loading cargo ..                           | .. | 1  | .. | 4  | 5  | .. | .. | .. | 2  | 3  | .. | ..        | 2  | .. | 3  |
|                           | Fall (including fall from vehicle) ..      | .. | 7  | .. | 4  | 11 | .. | .. | 1  | 3  | 7  | 1  | 81.00     | 3  | .. | 7  |
|                           | Flying object ..                           | .. | 2  | .. | 1  | 3  | .. | .. | 2  | 1  | .. | 2  | 1,726.80  | 1  | .. | .. |
|                           | Falling object (including falling tree) .. | .. | 6  | .. | 7  | 13 | .. | .. | 4  | 2  | 7  | 4  | 1,209.51  | 2  | .. | 7  |
|                           | Injured by machinery ..                    | .. | 5  | .. | 5  | 10 | .. | .. | 3  | .. | 7  | 3  | 2,600.00  | .. | .. | 7  |
|                           | Vehicle accident ..                        | .. | 2  | .. | 5  | 7  | .. | .. | 1  | 4  | 2  | 1  | 78.00     | 4  | .. | 2  |
|                           | Drowning ..                                | 1  | .. | 1  | .. | 2  | 2  | .. | .. | .. | .. | .. | ..        | .. | 1  | .. |
|                           | Gored by wild pig ..                       | .. | .. | 1  | .. | 1  | 1  | .. | .. | .. | .. | .. | ..        | .. | 1  | .. |



|                             |  |            |           |            |              |            |           |            |            |            |            |                   |            |           |            |            |    |
|-----------------------------|--|------------|-----------|------------|--------------|------------|-----------|------------|------------|------------|------------|-------------------|------------|-----------|------------|------------|----|
| Religion and social welfare | Electrocution .. .. .                      | ..         | ..        | 1          | ..           | 1          | 1         | ..         | ..         | ..         | ..         | ..                | ..         | ..        | ..         | 1          | .. |
|                             | Injured by handtool ..                     | ..         | 1         | ..         | 2            | 3          | ..        | ..         | 1          | ..         | 2          | 1                 | 208.98     | ..        | ..         | ..         | 2  |
| Health and hospital         | Vehicle accident (including tractor) ..    | 2          | 1         | 1          | 3            | 7          | 3         | ..         | 1          | ..         | 3          | 1                 | 754.65     | ..        | ..         | 3          | 3  |
|                             | Injured by machinery ..                    | ..         | 3         | ..         | 3            | 6          | ..        | ..         | 2          | ..         | 4          | 2                 | 605.90     | ..        | ..         | ..         | 4  |
|                             | Falling object .. .. .                     | ..         | 1         | 2          | 2            | 5          | 2         | ..         | ..         | 1          | 2          | ..                | ..         | 1         | ..         | 2          | 2  |
|                             | Flying object .. .. .                      | ..         | ..        | ..         | 1            | 1          | ..        | ..         | ..         | ..         | 1          | ..                | ..         | ..        | ..         | ..         | 1  |
|                             | Vehicle accident .. .. .                   | ..         | ..        | 2          | ..           | 2          | 2         | ..         | ..         | ..         | ..         | ..                | ..         | ..        | ..         | 2          | .. |
|                             | Fall .. .. .                               | ..         | 2         | ..         | 2            | 4          | ..        | ..         | 1          | 1          | 2          | 1                 | 438.75     | 1         | ..         | ..         | 2  |
|                             | Injured by handtool ..                     | ..         | 1         | ..         | 2            | 3          | ..        | ..         | 2          | ..         | 1          | 2                 | 525.60     | ..        | ..         | ..         | 1  |
|                             | Burns .. .. .                              | ..         | ..        | ..         | 1            | 1          | ..        | ..         | ..         | 1          | ..         | ..                | ..         | 1         | ..         | ..         | .. |
|                             | Explosion .. .. .                          | ..         | ..        | ..         | 1            | 1          | ..        | ..         | ..         | ..         | 1          | ..                | ..         | ..        | ..         | ..         | 1  |
|                             | Injured by machinery ..                    | ..         | ..        | ..         | 3            | 3          | ..        | ..         | ..         | ..         | 3          | ..                | ..         | ..        | ..         | ..         | 3  |
| Not elsewhere classified    | Fall .. .. .                               | ..         | 2         | ..         | ..           | 2          | ..        | ..         | ..         | ..         | 2          | ..                | ..         | ..        | ..         | 2          | .. |
|                             | Drowning .. .. .                           | 2          | ..        | ..         | ..           | 2          | 2         | ..         | ..         | ..         | ..         | ..                | ..         | ..        | ..         | ..         | .. |
|                             | Fall (including fall from vehicle) .. .. . | 1          | 5         | ..         | 9            | 15         | 1         | ..         | 2          | 3          | 9          | 3                 | 3,753.20   | 3         | ..         | ..         | 9  |
|                             | Vehicle accident (including tractor) ..    | 3          | 4         | 3          | 2            | 12         | 6         | ..         | ..         | 1          | 5          | 1                 | 2,700.00   | 1         | 2          | 3          | 5  |
|                             | Falling object (including falling tree) .. | 1          | 6         | 1          | 5            | 13         | 2         | ..         | 1          | 6          | 4          | 1                 | 297.00     | 6         | ..         | 2          | 4  |
|                             | Injured by machinery ..                    | ..         | 5         | ..         | 6            | 11         | ..        | ..         | 4          | 2          | 5          | 4                 | 961.21     | 2         | ..         | ..         | 5  |
|                             | Injured by handtool ..                     | ..         | 3         | ..         | 9            | 12         | ..        | ..         | 3          | 1          | 8          | 3                 | 1,770.00   | 1         | ..         | ..         | 8  |
|                             | Flying object .. .. .                      | ..         | 2         | ..         | 8            | 10         | ..        | ..         | 1          | 1          | 8          | 1                 | 174.15     | 1         | ..         | ..         | 8  |
|                             | Burns .. .. .                              | ..         | ..        | ..         | 4            | 4          | ..        | ..         | 1          | 3          | ..         | ..                | ..         | 3         | ..         | ..         | 1  |
|                             | Drowning .. .. .                           | 2          | ..        | 2          | ..           | 4          | 4         | ..         | ..         | ..         | ..         | 1                 | 480.00     | ..        | ..         | 3          | .. |
|                             | Assault .. .. .                            | ..         | ..        | ..         | ..           | ..         | ..        | ..         | ..         | ..         | ..         | ..                | ..         | ..        | ..         | ..         | .. |
|                             | Playing sport .. .. .                      | ..         | 2         | ..         | 2            | 4          | ..        | ..         | 1          | 1          | 2          | 1                 | 600.00     | 1         | ..         | ..         | 2  |
|                             | Handling cargo .. .. .                     | ..         | ..        | ..         | 1            | 1          | ..        | ..         | 1          | ..         | ..         | 1                 | 351.00     | ..        | ..         | ..         | .. |
|                             | Closing door .. .. .                       | ..         | ..        | ..         | 1            | 1          | ..        | ..         | ..         | ..         | 1          | ..                | ..         | ..        | ..         | ..         | 1  |
| Explosion .. .. .           | ..   | ..         | ..        | 1          | 1            | ..         | ..        | ..         | ..         | 1          | ..         | ..                | ..         | ..        | ..         | 1          |    |
| <b>Total</b> .. .. .        | <b>88</b>                                  | <b>470</b> | <b>63</b> | <b>439</b> | <b>1,060</b> | <b>151</b> | <b>..</b> | <b>228</b> | <b>198</b> | <b>483</b> | <b>246</b> | <b>131,243.65</b> | <b>199</b> | <b>21</b> | <b>112</b> | <b>483</b> |    |

APPENDIX XVII—continued

6. ILLNESSES AND DEATHS DUE TO OCCUPATIONAL DISEASE DURING PERIOD  
1 JULY 1971 TO 29 FEBRUARY 1972

No illnesses or deaths attributable to occupational disease were reported during the period under review.

7. PROSECUTIONS FOR BREACHES OF NATIVE EMPLOYMENT ORDINANCE 1958-1971 BY EMPLOYERS DURING PERIOD  
1 JULY 1971 TO 29 FEBRUARY 1972

No employers were prosecuted for offences under the *Native Employment Ordinance* 1958-1971 during the period under review.

8. PROSECUTIONS FOR BREACHES OF NATIVE EMPLOYMENT ORDINANCE 1958-1971 BY EMPLOYEES DURING PERIOD  
1 JULY 1971 TO 29 FEBRUARY 1972

No employees were prosecuted for offences under the *Native Employment Ordinance* 1958-1971 during the period under review.

9. DETAILS OF BREACHES OF PAPUA NEW GUINEAN EMPLOYEES AGREEMENTS BY WORKERS AND EMPLOYERS RESULTING IN  
VARIATION OR TERMINATION OF AGREEMENT DURING YEAR ENDED 30 JUNE 1972

| Nature of breach  | Section of<br><i>Native<br/>Employment<br/>Ordinance</i><br>1958-1971 | Terminated   | Varied     | Total        |
|---|---|--------------|------------|--------------|
| Term extended by court to cover period of imprisonment ..   | 43 (1) (b)  | ..           | 90         | 90           |
| Term extended by court to cover period of imprisonment ..   | 43 (1) (c)  | ..           | 30         | 30           |
| Term extended by court to cover period of imprisonment ..   | 43 (2) (b)  | ..           | 48         | 48           |
| Term extended by court to cover period of unauthorised absence ..   | 43 (3) (b)  | ..           | 7          | 7            |
| Unauthorised absence .. .. .  | 48 (2) (a)<br>and (b)   | 1,030        | ..         | 1,030        |
| Worker convicted of an offence against the Native Employment<br>Ordinance or other law relating to employment .. .. . | 49 (1) (a)  | 11           | ..         | 11           |
| Absence due to imprisonment exceeding seven days .. .. .  | 49 (1) (b)  | 25           | ..         | 25           |
| Worker negligent in discharge of his duties .. .. .   | 49 (1) (c)  | 16           | ..         | 16           |
| Disobeying a lawful order .. .. .   | 49 (1) (d)  | 103          | ..         | 103          |
| Absence from work without leave or reasonable excuse .. .. .  | 49 (1) (e)  | 390          | ..         | 390          |
| Committing act or omission which justifies termination .. .. .  | 49 (1) (f)  | 2            | ..         | 2            |
| Worker unfit for any reason to carry out his duties .. .. .   | 49 (4) (a)  | 8            | ..         | 8            |
| Employer negligent in discharge of his duties .. .. .   | 49 (4) (c)  | 2            | ..         | 2            |
| <b>Total</b> .. .. .  | ..  | <b>1,587</b> | <b>175</b> | <b>1,762</b> |

Note: In addition there were 762 terminations by Employment Officers under Section 48 (1), that is, by mutual consent of the employer and employee.

10. INDUSTRIAL DISPUTES WHICH OCCURRED DURING YEAR ENDED 30 JUNE 1972: CAUSE, NUMBER OF WORKERS INVOLVED,  
MAN-DAYS LOST AND SETTLEMENT, BY TYPE OF INDUSTRY

| Industry        | Cause  | Number of Papua New Guinean workers involved |        |              | Number of man-days lost | Settlement   |
|-----------------|--|--|--------|--------------|-------------------------|--|
|                 |  | Private                                      |        | Governmental |                         |  |
|                 |  | Agreement                                    | Casual |              |                         |  |
| Copra and Cocoa | Workers alleged that they had not received their full wage entitlements          | 30   | ..     | ..           | 60                      | The Labour Officer examined the records and court proceedings were instituted against management for breaches of the <i>Native Employment Ordinance</i> . Following discussions with Industrial Relations Officer 81 workers resumed work. The remainder had agreements terminated by court action |
|                 | Workers demanded a payment of \$80 cash on completion of their 2 year agreements | 120  | ..     | ..           | 715                     |  |

APPENDIX XVII—continued

10. INDUSTRIAL DISPUTES WHICH OCCURRED DURING YEAR ENDED 30 JUNE 1972: CAUSE, NUMBER OF WORKERS INVOLVED, MAN-DAYS LOST AND SETTLEMENT, BY TYPE OF INDUSTRY—continued

| Industry                             | Cause   | Number of Papua New Guinean workers involved |        |              | Number of man-days lost | Settlement  |
|--------------------------------------|---|--|--------|--------------|-------------------------|---|
|                                      |   | Private                                      |        | Governmental |                         |   |
|                                      |   | Agreement                                    | Casual |              |                         |   |
| Copra and cocoa—<br><i>continued</i> | Demand for higher wage rates  | 25   | 51     | ..           | 127                     | Employees resumed work of their own accord following discussions with management  |
|                                      | Agreement Workers were dissatisfied with wage rates and refusal by management to allow further credit at plantation trade store | 54   | ..     | ..           | 54                      | Management instituted a method of planting of gardens by employees to augment their food supplies   |
|                                      | Workers were dissatisfied with tobacco issue under new wage structure   | 6  | ..     | ..           | 7                       | The Labour Officer explained all components of new rural wage. Work resumed   |
|                                      | Men demanded money in lieu of rations and a fortnightly pay day   | 143  | ..     | ..           | 369                     | Following discussions between management employees and a Labour Officer, work resumed   |
|                                      | Employees alleged they had been underpaid   | 84   | ..     | ..           | 24                      | Men accepted a full explanation of the wage structure and resumed work  |
|                                      | Employees were dissatisfied with attitude of Manager towards his workers  | 15   | ..     | ..           | 68                      | A Labour Officer held discussions with the parties to establish more amicable relationships. Work resumed   |
|                                      | Employees complained that bonuses were discontinued when there were insufficient dry nuts to cut and bag                        | 3  | ..     | ..           | 2                       | A Labour Officer explained the method of bonus payments and employees resumed duty  |
|                                      | Resentment when expected pay increase was not forthcoming   | 47   | ..     | ..           | 47                      | Workers resumed duty when Labour Officer explained that wage increases would be paid when the new rates became law.                                   |
|                                      | Plantation workers demanded removal of supervisor   | 570  | ..     | ..           | 3,020                   | Following discussions between men, management and a Senior Labour Officer work resumed with a better relationship established between the parties     |
| Coffee ..                            | Labourers refused duty because of dissatisfaction with wage rates   | ..   | 13     | ..           | 13                      | Work resumed following discussions between Labour Officer, men and management   |
| Tea ..                               | Workers demanded the reinstatement of a field supervisor who had allegedly been dismissed for absenting himself from work       | ..   | 183    | ..           | 183                     | Management refused to re-instate supervisor. Work resumed   |
| Sawmilling ..                        | Employees demanded increases in wage rates  | ..   | 123    | ..           | 38                      | Management agreed to an increase in wage rates  |
|                                      | Dissatisfaction with wage rates and employment conditions   | ..   | 140    | ..           | 122                     | Employees resumed work of their own accord  |
|                                      | Dissatisfaction with wage rates and employment conditions   | ..   | 60     | ..           | 85                      | Labour Officer inspected records and ascertained that rates paid were correct. Management agreed to institute an envelope system for payment of wages |

APPENDIX XVII—continued

10. INDUSTRIAL DISPUTES WHICH OCCURRED DURING YEAR ENDED 30 JUNE 1972: CAUSE, NUMBER OF WORKERS INVOLVED, MAN-DAYS LOST AND SETTLEMENT, BY TYPE OF INDUSTRY—continued

| Industry                                | Cause  | Number of Papua New Guinean workers involved |        |              | Number of man-days lost | Settlement  |
|---|--|--|--------|--------------|-------------------------|---|
|   |  | Private                                      |        | Governmental |                         |   |
|   |  | Agreement                                    | Casual |              |                         |   |
| Forestry                                | Workers demanded wage increases  | ..   | ..     | 50           | 50                      | Employees claim was to be examined by the employing Department  |
|   | Demand for increased wage rates and improved conditions of employment                                      | ..   | ..     | 22           | 19                      | Two employees were dismissed following discussions between men, management and a Labour Officer                             |
|   | Employees were dissatisfied with delays in payment of new minimum rural wage rate                          | ..   | ..     | 500          | 1,000                   | The employees were given a full explanation of the implementation of the new wage rate which they accepted and resumed duty |
| Rubber                                  | Plantation workers demanded re-introduction of bonus payments  | 28   | ..     | ..           | 28                      | Management refused to meet demands because of production drop and depressed prices for rubber                               |
| Mining (Exploration)                    | Employees demanded better working conditions   | ..   | 83     | ..           | 83                      | Dispute settled between the parties   |
| Services incidental to rural industries | Delay in incremental payment which employees had been anticipating   | ..   | ..     | 24           | 12                      | Delay in the payment of increments was rectified. Work resumed  |
| Building and construction               | Workers demanded higher wages  | ..   | 48     | ..           | 60                      | Management refused increases but agreed to a review of classified positions   |
|   | Employees demanded five days pay on termination instead of five days notice as provided for in their award | ..   | 67     | ..           | 168                     | Management refused to accede to their demands. Work resumed under existing conditions                                       |
|   | Workers claimed that wages were not paid on date due   | ..   | 14     | ..           | 17                      | Workers resumed following assurance by management that delay would be rectified   |
|   | Workers demanded to be accommodated in integrated quarters   | ..   | 18     | ..           | 18                      | Management explained that when new buildings under construction were completed they would be housed in integrated quarters  |
|   | Workers refused to resume duty when lunchtime canteen failed to arrive at work site                        | ..   | 88     | ..           | 44                      | Management agreed to arrange alternative luncheon facilities should canteen fail to arrive in future                        |
|   | Workers demanded repatriation following the alleged murder of a fellow employee                            | ..   | 11     | ..           | 2                       | Following discussions with officers of the Labour Department and management, employees resumed work                         |
|   | Workers misunderstood wage rate calculations   | ..   | 48     | ..           | 12                      | Work resumed following explanation of calculations by management  |
|   | Men demanded that wage rates should be identical regardless of classifications                             | ..   | 28     | ..           | 31                      | Management refused to alter method of paying higher rates to classified workers   |
|   | Lack of communication between men and management   | ..   | 127    | ..           | 156                     | Following discussions between men, management and a Labour Officer, work resumed  |
|   | Dissatisfaction with method employed by management in showing wage rate calculations on pay envelopes      | ..   | 23     | ..           | 4                       | Management agreed to simplify the calculations shown on envelopes   |



APPENDIX XVII—continued

10. INDUSTRIAL DISPUTES WHICH OCCURRED DURING YEAR ENDED 30 JUNE 1972: CAUSE, NUMBER OF WORKERS INVOLVED, MAN-DAYS LOST AND SETTLEMENT, BY TYPE OF INDUSTRY—continued

| Industry                                | Cause   | Number of Papua New Guinean workers involved |        |              | Number of man-days lost | Settlement   |
|---|---|--|--------|--------------|-------------------------|--|
|   |   | Private                                      |        | Governmental |                         |  |
|   |   | Agreement                                    | Casual |              |                         |  |
| Building and construction<br>—continued | Employees refused duty following rumours that deductions would be made from wages for time lost due to rain   | ..   | 39     | ..           | 68                      | Rumours were unfounded as workers were paid for time lost. Work resumed  |
|   | Misunderstanding over wage structure  | ..   | 11     | ..           | 11                      | Labour officers and management explained in full the break up of wage rates following which work resumed   |
|   | Men refused duty when management did not meet their demands for higher wages  | ..   | 18     | ..           | 10                      | Management agreed to review wage rates in one month in the light of production. Workers, who were already on above award rates, accepted this settlement   |
|   | Lack of communication between men and management and dissatisfaction with wage rates  | ..   | 24     | ..           | 24                      | Labour Officer held discussions between men and management following which work resumed  |
|   | Workers complained that pay days were irregular   | ..   | 27     | ..           | 73                      | Management assured men that delays in payment of wages would be rectified  |
|   | Employees demand higher rates of pay  | ..   | 25     | ..           | 9                       | Management granted wage increases  |
|   | Workers were dissatisfied with rates, non payment of tool allowance and alleged unpaid overtime   | ..   | 14     | ..           | 14                      | Labour Officer examined records and found all overtime rates had been paid. Management agreed to review wage rates. Work resumed   |
|   | Employees were dissatisfied with—<br>(a) low wage rates<br>(b) poor housing<br>(c) no incremental payments<br>(d) fluctuations in weekly wage                           | ..   | 27     | ..           | 23                      | Management reconsidered initial action of dismissing all workers involved in the stoppage. Work resumed following discussions with Industrial Relations Officers                                   |
|   | Factory workers demanded re-classification of positions and general review of wages and employment conditions   | ..   | 44     | ..           | 25                      | A Board of Reference was appointed to examine grievances. Employees resumed work pending the outcome of the decisions made by the Board  |
|   | Dissatisfaction with wage rates   | ..   | 200    | ..           | 200                     | The employees lodged a log of claims on the Employers' Federation. Work resumed  |
|   | Workers alleged that their wages were incorrect   | ..   | 11     | ..           | 11                      | Industrial Relations Officers examined records of payments which were found correct. Management agreed to adjust some leave entitlements   |
|   | Employees were dissatisfied with—<br>(a) wage rates<br>(b) deductions for lunches provided<br>(c) non-payment of overtime<br>(d) wage rates paid during training period | ..   | 81     | ..           | 81                      | Following discussions between men, management and Labour officers, a log of claims was lodged on the company for an agreement to cover workers in this industry. Pending negotiations work resumed |
|   | Employees demanded identical pay rates for work performed regardless of classifications   | ..   | 14     | ..           | 6                       | The employees resumed duty following discussions with management and a Labour Officer  |

APPENDIX XVII—continued

10. INDUSTRIAL DISPUTES WHICH OCCURRED DURING YEAR ENDED 30 JUNE 1972: CAUSE, NUMBER OF WORKERS INVOLVED, MAN-DAYS LOST AND SETTLEMENT, BY TYPE OF INDUSTRY—continued

| Industry      | Cause  | Number of Papua New Guinean workers involved |        |              | Number of man-days lost | Settlement   |
|---------------|--|--|--------|--------------|-------------------------|--|
|               |  | Private                                      |        | Governmental |                         |  |
|               |  | Agreement                                    | Casual |              |                         |  |
| Manufacturing | Dissatisfaction with wages and overtime rates  | ..   | 53     | ..           | 29                      | All overtime and wage rates paid were examined by Labour Officer and found to be correct. Management dismissed the employees but later re-employed all but two workers                               |
|               | Misunderstanding of wage rate calculations   | ..   | 10     | ..           | 4                       | An Industrial Relations Officer gave an explanation of calculations to employees following which work resumed  |
|               | Employees alleged that they had not been paid increments due and that queries on wage rates had not been answered by management                        | ..   | 85     | ..           | 85                      | Industrial Relations Officers investigated complaints which were unfounded. Work resumed   |
|               | Employees demand higher wages  | ..   | 200    | ..           | 240                     | Men resumed work when Labour Officer told them that their wages were above award rates   |
|               | Workers were dissatisfied with reduced wages due to cut in production during heavy rain  | ..   | 28     | ..           | 28                      | Work resumed following discussions with Industrial Relations Officers, men and management which resolved policy on wet weather payments  |
|               | Discontent over wage rates together with lack of communication between men and management  | ..   | 51     | ..           | 13                      | No negotiations took place as men resumed work of their own accord   |
| Transport ..  | During a stevedoring dispute drivers refused to man company vehicles   | ..   | 50     | ..           | 25                      | Drivers resumed work following discussions with Labour Officers and management   |
|               | Refusal by supervisor to grant permission for use of transport for personal excursions   | ..   | ..     | 6            | 6                       | Workers resumed duty of their own accord   |
|               | Dissatisfaction with overtime rates paid for gazetted public holidays  | ..   | 16     | ..           | 10                      | An examination of the records of the company by a Labour Officer revealed that employees had been underpaid. Management was instructed to adjust rates immediately                                   |
|               | Employees were dissatisfied with—<br>(a) wage rates<br>(b) rates paid for public holidays<br>(c) accommodation provided<br>(d) rates paid for overtime | ..   | 101    | ..           | 38                      | Wage fluctuations had occurred when workers absented themselves from duty following pay day. Management agreed to examine accommodation complaints   |
|               | Workers alleged that wages paid were incorrect   | ..   | 12     | ..           | 8                       | Workers resumed duty when the Labour Officer assured them that he had examined records and found all rates to be correct   |
|               | Workers alleged that—<br>(a) overtime rates were incorrect<br>(b) no payments had been made for work performed on public holiday                       | ..   | 12     | ..           | 12                      | Examination of records by a Labour Officer revealed that all allegations were groundless with exception of (c). Management was instructed to cease all deductions from wages for damages to vehicles |

APPENDIX XVII—continued

10. INDUSTRIAL DISPUTES WHICH OCCURRED DURING YEAR ENDED 30 JUNE 1972: CAUSE, NUMBER OF WORKERS INVOLVED, MAN-DAYS LOST AND SETTLEMENT, BY TYPE OF INDUSTRY—continued

| Industry                    | Cause  | Number of Papua New Guinean workers involved |        |              | Number of man-days lost | Settlement   |
|-----------------------------|--|--|--------|--------------|-------------------------|--|
|                             |  | Private                                      |        | Governmental |                         |  |
|                             |  | Agreement                                    | Casual |              |                         |  |
| Transport—<br>continued     | (c) deductions made from wages for damages incurred to vehicles  | ..   | 27     | ..           | 12                      | Management terminates services of three employees; remainder resumed duty  |
|                             | (d) wage rates generally were too low  | ..   | 60     | ..           | 40                      | Management agreed to show a full break up of wage calculations on pay packets. Work resumed  |
|                             | Men failed to report for duty and refused to furnish explanations for absences   | ..   | 58     | ..           | 238                     | A Board of Reference was appointed to examine grievances and the Board determined that rental deductions cease until accommodation was brought up to required standard |
|                             | Dissatisfaction with wage rates generally and confusion caused by variations in overtime payments  | ..   | ..     | 14           | 3                       | The Assistant District Commissioner advised the men that all grievances would be examined and any delay in payments rectified  |
|                             | Dissatisfaction with wage rates and deductions for accommodation provided  | ..   | 64     | ..           | 34                      | The drivers resumed work following discussions with Industrial Relations Officers and Management   |
|                             | Employees complained of delay in payment of wages due, distribution of overtime and delays in payment of wages following resumption from leave | ..   | 23     | ..           | 46                      | No actual settlement affected. Four men refused to return to work, the remainder resumed duty  |
| Religion and social welfare | Men demanded higher wage rates   | ..   | 20     | ..           | 60                      | Annual increments were brought forward by management and future wage policy resolved between the parties   |
|                             | Employees demanded wage increases  | ..   | 32     | ..           | 17                      | Work resumed following return of manager   |
| Commerce ..                 | During manager's absence employees refused to work for assistant manager   | ..   | 165    | ..           | 144                     | Work resumed following discussions with Labour Officers and management. Matter not fully resolved during negotiations  |
|                             | Employees resented the action of an employer who refused to acknowledge an expatriate union representative as a bona-fide union official       | ..   | 20     | ..           | 5                       | Employees resumed work under existing conditions   |
|                             | Demand for higher wage and overtime rates  | ..   | 21     | ..           | 21                      | Work resumed following explanation of calculations by an Industrial Relations Officer  |
|                             | Misunderstanding of wage calculations  | ..   | 14     | ..           | 11                      | The stoppage was due to a misunderstanding. Work resumed when management gave an explanation of calculations   |
|                             | Employees were dissatisfied when an expected increase was not forth-coming   | ..   | ..     | 12           | 16                      | Settlement not fully effected but pending further discussions employees agreed to resume work  |
| Local government            | Employees demanded increases in wages and allowances   | ..   | ..     | 12           | 16                      | Settlement not fully effected but pending further discussions employees agreed to resume work  |

APPENDIX XVII—*continued*

10. INDUSTRIAL DISPUTES WHICH OCCURRED DURING YEAR ENDED 30 JUNE 1972: CAUSE, NUMBER OF WORKERS INVOLVED, MAN-DAYS LOST AND SETTLEMENT, BY TYPE OF INDUSTRY—*continued*

| Industry                 | Cause   | Number of Papua New Guinean workers involved |        |              | Number of man-days lost | Settlement   |
|--------------------------|---|--|--------|--------------|-------------------------|--|
|                          |   | Private                                      |        | Governmental |                         |  |
|                          |   | Agreement                                    | Casual |              |                         |  |
| Shipping and stevedoring | Stevedores complained of—<br>(a) insufficient wages<br>(b) incorrect payment for work performed<br>(c) alleged extortion by wharf clerks<br>(d) lack of communication between employees and expatriate supervisor | ..   | 437    | ..           | 2,813                   | Discussions and conferences between men, management and Labour Officers resulted in the negotiation of a new agreement for stevedores in that port |
| Health and hospitals     | Employees alleged that they were overworked and that accommodation was below standard   | ..   | ..     | 20           | 20                      | Investigations were to be carried out by the employing Department. Work resumed  |
| Not elsewhere specified  | Army civilian personnel complained of low wages and high cost of living   | ..   | ..     | 56           | 8                       | Employees were given a full explanation of classifications under awards. Work resumed  |
|                          | University labourers were dissatisfied with wage rates  | ..   | 57     | ..           | 13                      | Management agreed to the classification of several occupations following which work resumed  |

## APPENDIX XVII—continued

## 11. MEMBERSHIP OF INDUSTRIAL ASSOCIATIONS, CLASSIFIED BY ASSOCIATION AND ETHNIC GROUP AT 30 JUNE 1972

| Sector and name of association   | Papua<br>New Guinean | Expatriate   | Total         |
|--|----------------------|--------------|---------------|
| <b>Private Sector—</b>   |                      |              |               |
| Abau District Workers' Association .. .. .                               | (a)50                | ..           | (a)50         |
| Airline Employees' Association of PNG .. .. .                            | 3                    | 35           | (a)38         |
| Air Traffic Services Officers' Association .. .. .                       | 50                   | ..           | 50            |
| Airline Hostesses' Association of PNG .. .. .                            | (a)39                | (a)8         | 47            |
| Bank Officials' Association of PNG .. .. .                               | 80                   | ..           | 80            |
| Bougainville Christian Teachers' Association .. .. .                     | (b)                  | ..           | (b)           |
| Bougainville Mining Workers' Union .. .. .                               | 800                  | ..           | 800           |
| Central District Building and Construction Workers' Union .. .. .        | 3,025                | ..           | 3,025         |
| Central District Transport Drivers and Workers' Union .. .. .            | 245                  | ..           | 245           |
| Central District Waterside Workers' Union .. .. .                        | 470                  | ..           | 470           |
| East Sepik District Workers' Association .. .. .                         | 25                   | ..           | 25            |
| Goroka Workers' Association .. .. .                                      | 43                   | ..           | 43            |
| Gulf District Workers' Association .. .. .                               | 95                   | ..           | 95            |
| Kainantu Workers' Association .. .. .                                    | 21                   | ..           | 21            |
| Lombrum Naval Civilian Workers' Association .. .. .                      | 363                  | ..           | 363           |
| Madang Workers' Association .. .. .                                      | 100                  | ..           | 100           |
| Manus District Workers' Association .. .. .                              | 260                  | ..           | 260           |
| Merchant Services Officers' Association of Papua New Guinea .. .. .      | 2                    | 29           | 31            |
| Milne Bay District Workers' Association .. .. .                          | (a)340               | ..           | (a)340        |
| Morobe District Workers' Association .. .. .                             | 2,300                | ..           | 2,300         |
| New Ireland District Workers' Association .. .. .                        | 48                   | ..           | 48            |
| Northern District Workers' Association .. .. .                           | 51                   | ..           | 51            |
| Port Moresby Miscellaneous Workers' Union .. .. .                        | 2,500                | ..           | 2,500         |
| Port Moresby Clerical Workers' Union .. .. .                             | 7                    | ..           | 7             |
| Rabaul Workers' Association .. .. .                                      | 85                   | ..           | 85            |
| Staff Association of Institute of Higher Technical Education PNG .. .. . | 47                   | ..           | 47            |
| Staff Association of University of Papua New Guinea .. .. .              | 350                  | ..           | 350           |
| Western District Workers' Association .. .. .                            | 359                  | ..           | 359           |
| Western Highlands District Workers' Association .. .. .                  | 16                   | ..           | 16            |
| West Sepik District Workers' Association .. .. .                         | (a)25                | ..           | (a)25         |
| <b>Private Sector Total .. .. .</b>                                      | <b>11,799</b>        | <b>72</b>    | <b>11,871</b> |
| <b>Public Sector—</b>  |                      |              |               |
| Papua New Guinea Teachers' Association .. .. .                           | 1,361                | 363          | 1,724         |
| Police Association of Papua New Guinea .. .. .                           | 2,500                | ..           | 2,500         |
| Local Government Officers' Association .. .. .                           | (a)35                | ..           | (a)35         |
| Public Service Association of Papua New Guinea .. .. .                   | 13,000               | 3,134        | 16,134        |
| Senior Police Officers' Guild .. .. .                                    | ..                   | 39           | 39            |
| <b>Public Sector Total .. .. .</b>                                       | <b>16,896</b>        | <b>3,536</b> | <b>20,432</b> |
| <b>Grand Total.. .. .</b>  | <b>28,695</b>        | <b>3,608</b> | <b>32,303</b> |

(a) Estimates only. (b) Details unavailable.

## APPENDIX XVIII

### SOCIAL SECURITY AND WELFARE SERVICES

Information relating to social security and welfare services is set out in Part VII, Chapter 5, of this Report.

## APPENDIX XIX

### PUBLIC HEALTH

#### 1. HEALTH SERVICES, ADMINISTRATIVE AND ANCILLARY PERSONNEL, GOVERNMENT AND OTHER, AT 30 JUNE 1972

##### *Government*

| Designation  | Papua<br>New Guinean | Expatriate | Total |
|--|----------------------|------------|-------|
| Artisans .. .. .   | 49                   | ..         | 49    |
| Assistant, Drafting .. .. .  | 1                    | ..         | 1     |
| Assistant, Technical .. .. .   | 3                    | ..         | 3     |
| Bacteriologist .. .. .   | ..                   | 2          | 2     |
| Biochemist .. .. .   | ..                   | 1          | 1     |
| Clerk .. .. .  | 55                   | 87         | 142   |
| Clerical Assistant .. .. .   | 232                  | 97         | 329   |
| Clinical Supervisor .. .. .  | 1                    | 6          | 7     |
| Cook .. .. .   | 154                  | 5          | 159   |
| Chief Instructor .. .. .   | ..                   | 1          | 1     |
| Chief Health Inspector .. .. .   | ..                   | 1          | 1     |
| Accounting Machinist .. .. .   | ..                   | 2          | 2     |
| Dentist .. .. .  | 10                   | 17         | 27    |
| Dental Nurse, Registered .. .. .   | 50                   | ..         | 50    |
| Dental Nurse, Enrolled .. .. .   | 5                    | ..         | 5     |
| Dental Orderly .. .. .   | 28                   | ..         | 28    |
| Dental Technician .. .. .  | 18                   | 1          | 19    |
| Driver .. .. .   | 99                   | ..         | 99    |
| Director, First Assistant Directors, Assistant<br>Directors-Headquarters, Department of Public<br>Health .. .. . | ..                   | 8          | 8     |
| Dietician .. .. .  | ..                   | 2          | 2     |
| Entomologist .. .. .   | ..                   | 3          | 3     |
| Field Supervisor .. .. .   | 1                    | ..         | 1     |
| Health Extension Officer .. .. .   | 132                  | 46         | 178   |
| Health Extension Officer, Specialist .. .. .   | ..                   | 3          | 3     |
| Health Inspector .. .. .   | 24                   | 13         | 37    |
| Health Inspector Assistant .. .. .   | 10                   | ..         | 10    |
| Health Educator .. .. .  | 8                    | ..         | 8     |
| Hostel Superintendent .. .. .  | ..                   | 2          | 2     |
| Housekeeper .. .. .  | 2                    | 2          | 4     |
| Illustrations Assistant .. .. .  | ..                   | 1          | 1     |
| Interpreter .. .. .  | 1                    | ..         | 1     |
| Laboratory Assistant .. .. .   | 55                   | ..         | 55    |
| Lecturer .. .. .   | ..                   | 3          | 3     |
| Malaria Eradication Assistant .. .. .  | 229                  | 1          | 230   |
| Matron .. .. .   | 1                    | 15         | 16    |
| Malaria Field Assistant .. .. .  | 14                   | ..         | 14    |
| Malaria Eradication Officer .. .. .  | ..                   | 17         | 17    |
| Medical Officers .. .. .   | 51                   | 78         | 129   |
| Medical Officers, Specialist .. .. .   | 1                    | 30         | 31    |
| Medical Superintendent .. .. .   | ..                   | 6          | 6     |
| Messenger .. .. .  | 45                   | ..         | 45    |
| Mess Supervisor .. .. .  | 1                    | 17         | 18    |
| Medical Laboratory Technicians .. .. .   | ..                   | 5          | 5     |
| Manager, Artificial Limb Factory .. .. .   | ..                   | 1          | 1     |
| Nurse, Registered .. .. .  | 416                  | 193        | 609   |
| Nurse, Enrolled .. .. .  | 227                  | ..         | 227   |
| Nurse, Senior .. .. .  | 30                   | 31         | 61    |
| Nutritionist .. .. .   | ..                   | 2          | 2     |

APPENDIX XIX—continued

1. HEALTH SERVICES, ADMINISTRATIVE AND ANCILLARY PERSONNEL, GOVERNMENT AND OTHER,  
AT 30 JUNE 1972—continued

| Designation                          | Papua<br>New Guinea | Expatriate | Total        |
|--------------------------------------|---------------------|------------|--------------|
| Occupational Therapist .. .. .       | ..                  | 1          | 1            |
| Orderly .. .. .                      | 1,640               | ..         | 1,640        |
| Overseer .. .. .                     | 30                  | ..         | 30           |
| Operations Officer .. .. .           | 1                   | ..         | 1            |
| Pharmacist .. .. .                   | ..                  | 16         | 16           |
| Physiotherapist .. .. .              | ..                  | 7          | 7            |
| Pre-school Teachers .. .. .          | 14                  | 20         | 34           |
| Pre-school Assistants .. .. .        | 8                   | ..         | 8            |
| Principal, School of Nursing .. .. . | 1                   | 1          | 2            |
| Principal Matron .. .. .             | ..                  | 1          | 1            |
| Psychiatric Social Worker .. .. .    | ..                  | 1          | 1            |
| Radiographer .. .. .                 | 16                  | 3          | 19           |
| Seamstress .. .. .                   | 16                  | 1          | 17           |
| Storeman .. .. .                     | 52                  | ..         | 52           |
| Social Worker .. .. .                | ..                  | 1          | 1            |
| Steward .. .. .                      | 47                  | ..         | 47           |
| Supervisor, Hospital Nurses .. .. .  | 2                   | 2          | 4            |
| Supervisor, Infant Welfare .. .. .   | ..                  | 8          | 8            |
| Supervisor, Services .. .. .         | 4                   | 10         | 14           |
| Supervisor, Stores .. .. .           | 7                   | 8          | 15           |
| Technical Officer .. .. .            | 10                  | 3          | 13           |
| Technical Assistant .. .. .          | 29                  | 2          | 31           |
| Telephonist .. .. .                  | 23                  | ..         | 23           |
| Typist .. .. .                       | 10                  | 55         | 65           |
| Training Officer .. .. .             | ..                  | 4          | 4            |
| Tutor .. .. .                        | 5                   | 16         | 21           |
| Tutor Sister, Senior .. .. .         | ..                  | 1          | 1            |
| Vaccinator .. .. .                   | 1                   | ..         | 1            |
| Welfare Assistant .. .. .            | 1                   | ..         | 1            |
| X-ray Assistant .. .. .              | 28                  | ..         | 28           |
| Trainees .. .. .                     | 924                 | ..         | 924          |
| <b>Total .. .. .</b>                 | <b>4,822</b>        | <b>860</b> | <b>5,682</b> |

*Mission*

|   |            |           |            |
|---|------------|-----------|------------|
| Clerical Assistant .. .. .                          | ..         | 4         | 4          |
| Cook's Assistant .. .. .                            | 11         | ..        | 11         |
| Driver .. .. .                                      | 3          | ..        | 3          |
| General Labourer .. .. .                            | 55         | ..        | 55         |
| Handyman .. .. .                                    | 3          | ..        | 3          |
| Health Assistant (Health Extension Officer) .. .. . | 3          | 3         | 6          |
| Laboratory Assistant .. .. .                        | 2          | ..        | 2          |
| Laboratory Technician .. .. .                       | ..         | 1         | 1          |
| Laundryman .. .. .                                  | 1          | ..        | 1          |
| Medical Officers .. .. .                            | ..         | 5         | 5          |
| Nurse .. .. .                                       | 5          | 32        | 37         |
| Orderly .. .. .                                     | 151        | ..        | 151        |
| Physiotherapist/Nurse .. .. .                       | ..         | 3         | 3          |
| Secretary (Clerk) .. .. .                           | 1          | ..        | 1          |
| Stores Assistant .. .. .                            | 2          | ..        | 2          |
| <b>Total .. .. .</b>                                | <b>237</b> | <b>48</b> | <b>285</b> |

APPENDIX XIX—continued

2. HOSPITALS AND MEDICAL CENTRES AT 30 JUNE 1972

| Medical Establishments                               | Government | Mission | Total |
|--|------------|---------|-------|
| Hospitals—   |            |         |       |
| Public (including Maternity Wards) .. .. .           | 18         | 4       | 22    |
| Special (including Leprosy, Tuberculosis and Mental) | 1          | 15*     | 16    |
| Total .. .. .  | 19         | 19      | 38    |
| Health Centres .. .. .                               | 128        | 49      | 177   |
| Maternal and Child Health Centres .. .. .            | 22         | 223     | 245   |
| Total .. .. .  | 150        | 272     | 422   |
| Total—Aid Posts .. .. .                              | 1,416      | 217     | 1,633 |
| Total—All Establishments .. .. .                     | 1,585      | 508     | 2,093 |

\* Mission Special Hospitals are Government-subsidised by a variable amount.

Note: The Department of Public Health is engaged in the preparatory work for National Health Planning. As part of this work standard nomenclature has been introduced to describe health establishments. By definition a 'Hospital' must be either the main curative establishment in a District, i.e. the District Hospital or be a unit to handle only special medical problems, in which are included leprosy, tuberculosis, psychiatric or obstetric cases. Four mission general hospitals are included because they are located at District centres and act as part of the Hospital complex for the District. 'Health Centres' include all other establishments that are not purely performing Maternal and Child Health functions.

3. MEDICAL TRAINING: KNOWN MISSION TRAINEES AT 30 JUNE 1972

| Training course                           | Trainees |        |         |
|---|----------|--------|---------|
|   | Male     | Female | Persons |
| Anglican Mission—                         |          |        |         |
| Nursing—General .. .. .                   | 7        | 15     | 22      |
| Baptist Mission—                          |          |        |         |
| Nursing—Maternal and Child Health .. .. . | ..       | 24     | 24      |
| Catholic Mission—                         |          |        |         |
| Nursing—                                  |          |        |         |
| General .. .. .                           | 1        | 65     | 66      |
| Maternal and Child Health .. .. .         | ..       | 145    | 145     |
| Lutheran Mission—                         |          |        |         |
| Nursing—                                  |          |        |         |
| General .. .. .                           | 30       | 27     | 57      |
| Maternal and Child Health .. .. .         | ..       | 6      | 6       |
| Seventh Day Adventist Mission—            |          |        |         |
| Nursing—General .. .. .                   | 7        | 30     | 37      |
| United Church Mission—                    |          |        |         |
| Nursing—Maternal and Child Health .. .. . | ..       | 52     | 52      |
| Total .. .. .                             | 45       | 364    | 409     |
| Maternal and Child Health Trainees        |          |        |         |
| General Trainees .. .. .                  | 45       | 227    | 227     |
| Total .. .. .                             | 45       | 137    | 182     |
| Total .. .. .                             | 45       | 364    | 409     |



APPENDIX XIX—continued

4. MISSION ESTABLISHMENTS RECEIVING GRANTS IN AID: BY DISTRICT, NUMBER AND STATUS OF PERSON IN CHARGE AT 30 JUNE 1972

| District                   | Medical Officer | Nurse | Aid Post Orderly | Total |
|----------------------------|-----------------|-------|------------------|-------|
| <i>Papua</i>               |                 |       |                  |       |
| Western .. .. .            | 2               | 12    | ..               | 14    |
| Gulf .. .. .               | 1               | 6     | 12               | 19    |
| Central .. .. .            | 1               | 12    | 5                | 18    |
| Milne Bay .. .. .          | 1               | 14    | 5                | 20    |
| Northern .. .. .           | 1               | 6     | 4                | 11    |
| Southern Highlands .. .. . | Nil             | 14    | 4                | 18    |
| Total .. .. .              | 6               | 64    | 30               | 100   |
| <i>New Guinea</i>          |                 |       |                  |       |
| East Sepik .. .. .         | ..              | 17    | 1                | 18    |
| West Sepik .. .. .         | 2               | 15    | 1                | 18    |
| Western Highlands .. .. .  | 5               | 14    | 16               | 35    |
| Eastern Highlands .. .. .  | ..              | 8     | 5                | 13    |
| Chimbu .. .. .             | ..              | 6     | 1                | 7     |
| Madang .. .. .             | 3               | 11    | 6                | 20    |
| Morobe .. .. .             | 1               | 6     | 2                | 9     |
| West New Britain .. .. .   | ..              | 8     | 3                | 11    |
| East New Britain .. .. .   | 1               | 9     | ..               | 10    |
| Bougainville .. .. .       | 2               | 16    | ..               | 18    |
| New Ureland .. .. .        | ..              | 8     | ..               | 8     |
| Manus .. .. .              | ..              | 3     | ..               | 3     |
| Total .. .. .              | 14              | 121   | 35               | 170   |

5. GOVERNMENT HOSPITALS: LOCATION AND TYPE AT 1 SEPTEMBER 1972

| District            | Location of hospital | Type    | District           | Location of hospital | Type    |
|---------------------|----------------------|---------|--------------------|----------------------|---------|
| New Guinea—         |                      |         | New Guinea—        |                      |         |
| Bougainville ..     | Arawa .. .. .        | A and B | <i>continued—</i>  |                      |         |
|                     | *Torokina .. .. .    | B       | West Sepik ..      | Vanimo .. .. .       | A and B |
| Chimbu .. .. .      | Kundiawa .. .. .     | A and B |                    | *Raihu .. .. .       | B       |
| East New Britain    | Nonga Base .. .. .   | A and B | Western Highlands  | Mount Hagen .. .. .  | A and B |
|                     | †Vunapope .. .. .    | A and B |                    | *Togoba .. .. .      | B       |
|                     | *Bitapaka .. .. .    | B       |                    | *Yampu .. .. .       | B       |
| East Sepik .. .. .  | Wewak .. .. .        | A and B | Papua—             |                      |         |
| Eastern Highlands   | Goroka .. .. .       | A and B | Central .. .. .    | Port Moresby .. .. . | A and B |
| Madang .. .. .      | Madang .. .. .       | A and B |                    | †St Therese .. .. .  | B       |
|                     | †Yagaum .. .. .      | A and B |                    | *Gemo .. .. .        | B       |
|                     | *Asuar .. .. .       | B       |                    | *Laloki .. .. .      | B       |
| Manus .. .. .       | Lorengau .. .. .     | A and B | Gulf .. .. .       | Kerema .. .. .       | A and B |
| Morobe .. .. .      | Angau (Lae) .. .. .  | A and B | Milne Bay .. .. .  | Alotau .. .. .       | A and B |
|                     | *Etap .. .. .        | B       |                    | *Kwato .. .. .       | B       |
|                     | *Butaweng .. .. .    | B       |                    | *Ubuia .. .. .       | B       |
| New Ireland .. .. . | Kavieng .. .. .      | A and B | Northern .. .. .   | Popondetta .. .. .   | A and B |
|                     | *Anelaua .. .. .     | B       | Southern Highlands | Mendi .. .. .        | A and B |
| West New Britain    | Kimbe .. .. .        | A and B | Western .. .. .    | *Tari .. .. .        | B       |
|                     |                      |         |                    | Daru .. .. .         | A and B |
|                     |                      |         |                    | *Mapoda .. .. .      | B       |

A—Intermediate wards B—Public wards

\* Special hospitals.

† Large Mission hospitals providing central District hospital services. Vunapope is allied to Nonga Base Hospital, Yagaum to Madang District Hospital and St Therese to Port Moresby General Hospital.

APPENDIX XIX—continued

6. GOVERNMENT HOSPITALS AND HEALTH CENTRES AT 1 SEPTEMBER 1972, CLASSIFIED BY STATUS OF PERSON IN CHARGE\*

| Hospitals and Health Centres | Status of persons in charge |        | Total |
|------------------------------|-----------------------------|--------|-------|
|                              | Medical officers            | Others |       |
| Hospitals—                   |                             |        |       |
| District .. .. .             | 18                          | ..     | 18    |
| Mission General .. .. .      | 2                           | ..     | 2     |
| Special .. .. .              | 6                           | 11     | 17    |
| Total .. .. .                | 26                          | 11     | 37    |
| Health Centres—              |                             |        |       |
| Over 50 beds .. .. .         | 22                          | 15     | 37    |
| 20–50 beds .. .. .           | ..                          | 60     | 60    |
| Under 20 beds .. .. .        | ..                          | 140    | 140   |
| Urban .. .. .                | ..                          | 10     | 10    |
| Total .. .. .                | 22                          | 225    | 247   |

\* See Note, Table 2.

7. GOVERNMENT HOSPITALS BY DISTRICT SHOWING NUMBER OF BEDS, AVERAGE DAILY ADMISSIONS, TOTAL ADMISSIONS AND OUT-PATIENTS TREATED DURING YEAR ENDED 1 SEPTEMBER 1972

| Districts                  | Hospitals                    | Number of beds | Daily average | Total admissions                    | Out-patients |
|----------------------------|------------------------------|----------------|---------------|-------------------------------------|--------------|
| New Guinea—                |                              |                |               |                                     |              |
| Bougainville .. .. .       | Arawa .. .. .                | 218            | 96            | New hospital, figures not available |              |
| Chimbu .. .. .             | Kundiawa .. .. .             | 177            | 168           | 6,471                               | 8,420        |
| East New Britain .. .. .   | Nonga Base (Rabaul) .. .. .  | 328            | 274           | 8,143                               | 74,700       |
| East Sepik .. .. .         | Wewak .. .. .                | 354            | 208           | 5,105                               | 33,250       |
| Eastern Highlands .. .. .  | Goroka .. .. .               | 291            | 232           | 5,906                               | 55,340       |
| Madang .. .. .             | Madang .. .. .               | 280            | 224           | 4,542                               | 56,570       |
| Manus .. .. .              | Lorengau .. .. .             | 96             | 54            | 1,900                               | 15,740       |
| Morobe .. .. .             | Angau Memorial (Lae) .. .. . | 397            | 310           | 10,929                              | 98,830       |
| New Ireland .. .. .        | Kavieng .. .. .              | 140            | 90            | 2,241                               | 16,250       |
| West New Britain .. .. .   | Kimbe* .. .. .               | 120            | 40            | 712                                 | 10,330       |
| West Sepik .. .. .         | Vanimo .. .. .               | 57             | 46            | 725                                 | 10,780       |
| Western Highlands .. .. .  | Mount Hagen .. .. .          | 193            | 200           | 5,948                               | 23,590       |
| Papua—                     |                              |                |               |                                     |              |
| Central .. .. .            | Port Moresby General .. .. . | 487            | 397           | 13,708                              | 149,930      |
| Gulf .. .. .               | Kerema .. .. .               | 120            | 95            | 1,135                               | 16,810       |
| Milne Bay .. .. .          | Alotau .. .. .               | 86             | 46            | 987                                 | 6,572        |
| Northern .. .. .           | Popondetta .. .. .           | 80             | 52            | 2,108                               | 46,540       |
| Southern Highlands .. .. . | Mendi** .. .. .              | 130            | 112           | 3,249                               | 8,720        |

\* A new hospital of 120 beds is being built at Kimbe to replace the District Hospital at Talasea.  
 \*\* A new hospital of 154 beds is being built at Mendi.

See also Note, Table 8.

APPENDIX XIX—continued

8. SPECIAL HOSPITALS BY DISTRICT LOCATION, ADMINISTERING AUTHORITY, TYPE OF PATIENT, NUMBER OF BEDS, DAILY ADMISSIONS OF IN-PATIENTS, AND NUMBER OF OUT-PATIENTS TREATED DURING YEAR ENDED 30 JUNE 1972

| District              | Hospital       | Site                 | Church                   | Type of patient | Number of beds | Daily average in-patients | Daily average out-patients |
|-----------------------|----------------|----------------------|--------------------------|-----------------|----------------|---------------------------|----------------------------|
| New Guinea—           |                |                      |                          |                 |                |                           |                            |
| Bougainville ..       | Torokina ..    | Torokina ..          | Catholic ..              | L               | 70             | 24                        | ..                         |
| East New Britain ..   | Bitapaka ..    | Kokopo<br>(Vunapope) | Catholic ..              | T & L           | 350            | 279                       | 1                          |
| Madang ..             | *Asuar ..      | Yagaum ..            | Lutheran ..              | L               | 120            | 44                        | ..                         |
|                       | †Hatzfeldhaven | Bogia ..             | Seventh Day<br>Adventist | T & L           | 134            | 68                        | 12                         |
| Morobe ..             | Butaweng ..    | Finschhafen          | Lutheran ..              | T               | 450            | 150                       | 43                         |
|                       | Etep ..        | Etep ..              | Lutheran ..              | L               | 75             | 74                        | ..                         |
| New Ireland ..        | Anelaua ..     | New Hanover          | Catholic ..              | L               | 138            | 55                        | ..                         |
| West Sepik ..         | Raihu ..       | Aitape ..            | Catholic ..              | T & L           | 300            | 160                       | 35                         |
| Western Highlands ..  | Togoba ..      | Mount Hagen          | Seventh Day<br>Adventist | T & L           | 400            | 200                       | 1                          |
|                       | Yampu ..       | Wapena-<br>manda     | Catholic ..              | L               | 150            | 84                        | ..                         |
| Papua—                |                |                      |                          |                 |                |                           |                            |
| Central ..            | Gemo ..        | Gemo Island          | United<br>Church         | T & L           | 200            | 170                       | 25                         |
|                       | Laloki ..      | Port Moresby         | ..                       | P               | 90             | 81                        | 10                         |
|                       | St Therese ..  | Port Moresby         | Catholic ..              | O               | 85             | 71                        | ..                         |
| Milne Bay ..          | Ubuia ..       | Esa'ala ..           | United<br>Church         | T & L           | 200            | 98                        | 2                          |
| Northern ..           | *Embogo ..     | Popondetta..         | Anglican ..              | T & L           | 140            | 56                        | ..                         |
| Southern Highlands .. | Tari ..        | Tari ..              | United<br>Church         | L               | 54             | 30                        | ..                         |
| Western ..            | Mapoda ..      | Balimo ..            | ..                       | L               | 54             | 44                        | 5                          |

\* Embogo is to close and may remain as a general health centre and Asuar is to close.  
 † Hatzfeldhaven is to close as a special hospital and become a health centre.

L = leprosy                      P = psychiatric  
 T = tuberculosis                O = obstetric

Note: Two Mission hospitals that are general hospitals are not included in Table 7 or Table 8. These are:  
 Vunapope Hospital, Rabaul, a 300-bed Catholic hospital with a daily average of 150 patients; and  
 Yagaum Hospital, Madang, a 250-bed Lutheran hospital with a daily average of 200 patients.

APPENDIX XIX—continued

9. HEALTH CENTRES BY DISTRICT: AVERAGE NUMBER OF IN-PATIENTS, TOTAL ADMISSIONS, AND OUT-PATIENTS TREATED DURING YEAR ENDED 31 DECEMBER 1971

| District                            | Location of health centre | Daily average in-patients | Total admissions | Number of out-patients |
|-------------------------------------|---------------------------|---------------------------|------------------|------------------------|
| New Guinea—<br>Bougainville .. .. . | Buin .. .. .              | 10                        | 1,340            | 2,432                  |
|                                     | Gagan .. .. .             | 11                        | 1,316            | 16,800                 |
|                                     | Hanaham .. .. .           | 1                         | 300              | 18,000                 |
|                                     | Kieta .. .. .             | 76                        | 3,088            | 18,292                 |
|                                     | Konga .. .. .             | 1                         | 272              | 2,384                  |
|                                     | Monoitu .. .. .           | 18                        | 241              | 6,464                  |
|                                     | Morotona .. .. .          | 36                        | 1,206            | 19,220                 |
|                                     | Nissan .. .. .            | n.a.                      | n.a.             | n.a.                   |
|                                     | Panguna .. .. .           | 10                        | 830              | 14,800                 |
|                                     | Sohano .. .. .            | 75                        | 1,298            | 3,292                  |
|                                     | Sovele .. .. .            | 8                         | 327              | 4,968                  |
|                                     | Tearouk .. .. .           | 15                        | 560              | 15,524                 |
|                                     | Wakunai .. .. .           | 15                        | 512              | 1,724                  |
| Chimbu .. .. .                      | Chuave .. .. .            | 40                        | 833              | 812                    |
|                                     | Gembogl .. .. .           | 12                        | 1,790            | 9,364                  |
|                                     | Gumine .. .. .            | 65                        | 2,699            | 12,936                 |
|                                     | Kerowagi .. .. .          | 68                        | 2,489            | 14,974                 |
|                                     | Koge .. .. .              | 13                        | 583              | 12,800                 |
|                                     | Mingenge .. .. .          | 26                        | 1,517            | 17,536                 |
|                                     | Wandi .. .. .             | 3                         | 270              | 500                    |
| East New Britain .. .. .            | Butawin .. .. .           | 31                        | 1,290            | 11,192                 |
|                                     | Kerevat .. .. .           | 2                         | 223              | 7,696                  |
|                                     | Lassul Bay .. .. .        | 16                        | 185              | 1,696                  |
|                                     | Tapipipi .. .. .          | 3                         | 174              | 2,960                  |
|                                     | Vanapaka .. .. .          | 3                         | 202              | 9,052                  |
| East Sepik .. .. .                  | Ambunti .. .. .           | 23                        | 772              | 6,035                  |
|                                     | Angoram .. .. .           | 68                        | 673              | 8,044                  |
|                                     | Anguanak .. .. .          | 38                        | 1,154            | 15,400                 |
|                                     | Dreikikir .. .. .         | 26                        | 911              | 7,212                  |
|                                     | Timbunke .. .. .          | 26                        | 900              | 59,476                 |
|                                     | Wewak .. .. .             | ..                        | ..               | n.a.                   |
|                                     | Wombisa .. .. .           | ..                        | ..               | n.a.                   |
| Yangoru .. .. .                     | 17                        | 902                       | 6,624            |                        |
| Eastern Highlands .. .. .           | Asaro .. .. .             | 4                         | 512              | 9,860                  |
|                                     | Henganofi .. .. .         | 20                        | 648              | 2,871                  |
|                                     | Kainantu .. .. .          | 53                        | 2,797            | 5,940                  |
|                                     | Lufa .. .. .              | 13                        | 644              | 3,160                  |
|                                     | Okapa .. .. .             | 49                        | 1,507            | 10,544                 |
|                                     | Omaura .. .. .            | 1                         | 256              | 1,104                  |
|                                     | Onamuga .. .. .           | 33                        | 778              | 8,876                  |
|                                     | Sighere .. .. .           | 1                         | 123              | 6,148                  |
| Madang .. .. .                      | Alexishafen .. .. .       | 47                        | 1,756            | 15,000                 |
|                                     | Aiome .. .. .             | 10                        | 308              | 5,023                  |
|                                     | Bogia .. .. .             | 39                        | 1,039            | 4,536                  |
|                                     | Bunapas .. .. .           | 9                         | 664              | 4,328                  |
|                                     | Bundi .. .. .             | 12                        | 456              | 3,980                  |
|                                     | Gaubin .. .. .            | 172                       | 2,648            | 40,256                 |
|                                     | Hatzfeldhaven .. .. .     | 70                        | 353              | 3,052                  |
|                                     | Josephstaal .. .. .       | 9                         | 319              | 842                    |
|                                     | Miak .. .. .              | 22                        | 538              | 5,112                  |
|                                     | Mugil .. .. .             | 20                        | 1,427            | 41,872                 |
|                                     | Saidor .. .. .            | 18                        | 512              | 10,484                 |
|                                     | Simbai .. .. .            | 15                        | 808              | 34,922                 |
|                                     | Manus .. .. .             | Baluan .. .. .            | 1                | 124                    |
| Simbas .. .. .                      |                           | n.a.                      | n.a.             | n.a.                   |

## APPENDIX XIX—continued

9. HEALTH CENTRES BY DISTRICT: AVERAGE NUMBER OF IN-PATIENTS, TOTAL ADMISSIONS, AND OUT-PATIENTS TREATED DURING YEAR ENDED 31 DECEMBER 1971—continued

| District                               | Location of health centre | Daily average in-patients | Total admissions | Number of out-patients |
|--|---------------------------|---------------------------|------------------|------------------------|
| New Guinea—continued<br>Morobe .. .. . | Aseki .. .. .             | n.a.                      | n.a.             | n.a.                   |
|  | Awalkon .. .. .           | 16                        | 623              | 21,468                 |
|  | Boana .. .. .             | n.a.                      | n.a.             | n.a.                   |
|  | Buangi .. .. .            | 83                        | 1,989            | 6,576                  |
|  | Butibum .. .. .           | n.a.                      | n.a.             | n.a.                   |
|  | Bulolo .. .. .            | 41                        | 2,110            | 40,248                 |
|  | Garaina .. .. .           | n.a.                      | n.a.             | n.a.                   |
|  | Finschhafen .. .. .       | 93                        | 1,880            | 33,000                 |
|  | Kabwum .. .. .            | 2                         | 443              | 15,684                 |
|  | Kaipit .. .. .            | 10                        | 482              | 3,332                  |
|  | Kwadalim .. .. .          | 29                        | 992              | 14,604                 |
|  | Labaloma .. .. .          | n.a.                      | n.a.             | n.a.                   |
|  | Lab Lab .. .. .           | 8                         | 338              | 12,264                 |
|  | Menyama .. .. .           | 22                        | 453              | 12,528                 |
|  | Morobe .. .. .            | 6                         | 178              | 3,912                  |
|  | Mumeng .. .. .            | 8                         | 248              | 8,628                  |
|  | Sialum .. .. .            | n.a.                      | n.a.             | n.a.                   |
|  | Wagezaring .. .. .        | 32                        | 779              | 584                    |
|  | Wantoat .. .. .           | 10                        | 237              | 20,780                 |
|  | Wau .. .. .               | 48                        | 2,376            | 54,196                 |
| New Ireland .. .. .                    | Lavongai .. .. .          | 26                        | 652              | 41,000                 |
|  | Lemakot .. .. .           | 80                        | 3,380            | 19,036                 |
|  | Mussau .. .. .            | n.a.                      | n.a.             | n.a.                   |
|  | Namatanai .. .. .         | 60                        | 1,732            | 1,936                  |
|  | Tanga .. .. .             | 86                        | 982              | 39,100                 |
| West New Britain .. .. .               | Buvussi .. .. .           | n.a.                      | n.a.             | n.a.                   |
|  | Cape Gloucester .. .. .   | 44                        | 214              | 9,540                  |
|  | Ewasse .. .. .            | n.a.                      | n.a.             | n.a.                   |
|  | Gasmata .. .. .           | 2                         | 274              | 1,785                  |
|  | Kandrian .. .. .          | 6                         | 211              | 2,400                  |
|  | Talasea .. .. .           | 36                        | 912              | 9,920                  |
|  | Voloka .. .. .            | 19                        | 133              | 9,576                  |
| Witu .. .. .                           | 1                         | 101                       | 1,624            |                        |
| West Sepik .. .. .                     | Aitape .. .. .            | 46                        | 802              | 10,668                 |
|  | Amanab .. .. .            | 16                        | 238              | 3,660                  |
|  | Green River .. .. .       | 65                        | 481              | 3,224                  |
|  | Imonda .. .. .            | 11                        | 148              | 908                    |
|  | Lumi .. .. .              | n.a.                      | 912              | 11,320                 |
|  | Mambisanda .. .. .        | 95                        | n.a.             | n.a.                   |
|  | Nuku .. .. .              | 40                        | 517              | 4,188                  |
| Western Highlands .. .. .              | Baiyer River .. .. .      | 71                        | 2,125            | 8,760                  |
|  | Kandep .. .. .            | 29                        | 1,385            | 8,756                  |
|  | Koinambe .. .. .          | 18                        | 347              | 2,000                  |
|  | Kol .. .. .               | 23                        | 656              | 2,856                  |
|  | Kompiani 'A' .. .. .      | 15                        | 366              | 7,220                  |
|  | Kompiani 'B' .. .. .      | 7                         | 636              | 8,184                  |
|  | Kotna .. .. .             | 34                        | 1,937            | 1,740                  |
|  | Laiagam .. .. .           | 63                        | 2,448            | 15,628                 |
|  | Lake Kopiago .. .. .      | 16                        | 602              | 13,428                 |
|  | Minj .. .. .              | 14                        | 1,670            | 6,690                  |
|  | Pogera .. .. .            | 16                        | 547              | 4,356                  |
|  | Sopas .. .. .             | 66                        | 2,561            | 17,752                 |
|  | Tabubuga .. .. .          | 29                        | 690              | 3,532                  |
|  | Wabag .. .. .             | 72                        | 3,249            | 28,540                 |

APPENDIX XIX—continued

9. HEALTH CENTRES BY DISTRICT: AVERAGE NUMBER OF IN-PATIENTS, TOTAL ADMISSIONS, AND OUT-PATIENTS TREATED DURING YEAR ENDED 31 DECEMBER 1971—continued

| District            | Location of health centre | Daily average in-patients | Total admissions | Number of out-patients |
|---------------------|---------------------------|---------------------------|------------------|------------------------|
| Papua—<br>Central   | Badili                    | ..                        | ..               | n.a.                   |
|                     | Bereina                   | 39                        | 247              | 6,640                  |
|                     | Goilala                   | ..                        | ..               | 3,828                  |
|                     | Gordon                    | ..                        | ..               | n.a.                   |
|                     | Hanuabada                 | ..                        | ..               | n.a.                   |
|                     | Hohola                    | ..                        | ..               | 31,635                 |
|                     | Iruna                     | 12                        | 644              | 26,070                 |
|                     | Kupiano                   | 7                         | 284              | 4,528                  |
|                     | Kwikila                   | 27                        | 701              | 4,800                  |
|                     | Sogeri                    | ..                        | ..               | n.a.                   |
|                     | Veifa'a                   | 5                         | 87               | 71,640                 |
|                     | Voitape                   | 8                         | 62               | 3,040                  |
| Yule Island         | 1                         | 85                        | 71,064           |                        |
| Gulf..              | Ihu                       | 27                        | 454              | 3,400                  |
|                     | Kaintiba                  | n.a.                      | n.a.             | n.a.                   |
|                     | Kanabea                   | 3                         | n.a.             | n.a.                   |
|                     | Kikori                    | 41                        | 491              | 7,824                  |
|                     | Kukipi                    | 8                         | 240              | 4,209                  |
|                     | Orokolo                   | 53                        | 466              | 25,828                 |
|                     | Pureni                    | n.a.                      | n.a.             | n.a.                   |
| Milne Bay           | Agaum                     | n.a.                      | n.a.             | n.a.                   |
|                     | Dogura                    | 57                        | 2,137            | 21,440                 |
|                     | Losuia                    | 42                        | 917              | 3,893                  |
|                     | Mapomoiwa                 | 21                        | 259              | 1,916                  |
|                     | Misima                    | 19                        | 518              | 2,896                  |
|                     | Rabaraba                  | 12                        | 283              | 2,360                  |
|                     | Salamo                    | 25                        | 911              | 36,396                 |
|                     | Samaraj                   | 18                        | 670              | 4,168                  |
| Wailagi (Bolu Bolu) | 17                        | 1,183                     | 10,196           |                        |
| Northern            | Afore                     | n.a.                      | n.a.             | n.a.                   |
|                     | Eiwo                      | 8                         | n.a.             | n.a.                   |
|                     | Ioma                      | n.a.                      | 287              | 2,950                  |
|                     | Kokoda                    | 18                        | 780              | 10,444                 |
|                     | Oro Bay                   | 39                        | 976              | 4,280                  |
|                     | Saiho                     | 18                        | 1,001            | 12,872                 |
| Tufi                | 8                         | 471                       | 3,428            |                        |
| Southern Highlands  | Det                       | 50                        | 2,302            | 15,600                 |
|                     | Erave                     | 8                         | 712              | 2,856                  |
|                     | Kagua                     | 35                        | 1,607            | 2,120                  |
|                     | Ialibu                    | 42                        | 1,333            | 5,128                  |
|                     | Komo                      | 14                        | 502              | 19,600                 |
|                     | Koroba                    | 24                        | 608              | 3,267                  |
|                     | Margarima                 | 14                        | 818              | 9,260                  |
|                     | Nipa                      | 18                        | 505              | 8,592                  |
|                     | Pangia                    | 25                        | 377              | 23,332                 |
|                     | Poroma                    | n.a.                      | n.a.             | n.a.                   |
| Tari                | 111                       | 2,871                     | 26,416           |                        |
| Western             | Balimo                    | 167                       | 2,563            | 20,496                 |
|                     | Morehead                  | 1                         | 101              | 2,828                  |
|                     | Ningerum                  | 14                        | 398              | 3,500                  |
|                     | Rumginal                  | 67                        | 990              | 29,256                 |

n.a.—not available. ..—no in-patients.

APPENDIX XIX—continued

10. INCIDENCE OF PRINCIPAL DISEASES TREATED AND PRINCIPAL CAUSES OF DEATH IN GOVERNMENT HOSPITALS AND IMPORTANT CASE MORTALITY RATES IN PERCENTAGES FOR YEAR ENDED 31 MARCH 1970

Papua

| International classification code group | Disease or injury  | Number of discharges | Percentage of total discharges | Number of deaths | Percentage of total deaths | Death as a percentage of discharges |
|---|--|----------------------|--------------------------------|------------------|----------------------------|-------------------------------------|
| I                                       | Infective and parasitic diseases ..                                  | 9,477                | 26.0                           | 197              | 26.8                       | 2.0                                 |
|   | Malaria .. .. .  | 2,743                | 7.5                            | 22               | 3.0                        | 0.8                                 |
|   | Tuberculosis .. .. .   | 837                  | 2.3                            | 57               | 7.8                        | 6.8                                 |
|   | Leprosy .. .. .  | 342                  | 0.9                            | 1                | 0.1                        | 0.3                                 |
|   | Enteritis, and other diarrhoeal diseases .. .. .                     | 3,601                | 9.9                            | 78               | 10.6                       | 2.2                                 |
|   | Diseases due to helminths .. .. .                                    | 267                  | 0.7                            | 3                | 0.4                        | 1.1                                 |
| II                                      | Neoplasms .. .. .  | 452                  | 1.2                            | 61               | 8.3                        | 13.5                                |
|   | Malignant neoplasms .. .. .  | 271                  | 0.7                            | 58               | 7.9                        | 21.4                                |
|   | Benign neoplasms .. .. .   | 181                  | 0.5                            | 3                | 0.4                        | ..                                  |
| III                                     | Endocrine, nutritional and metabolic diseases .. .. .                | 359                  | 1.0                            | 22               | 3.0                        | 6.1                                 |
|   | Avitaminosis, malnutrition .. .. .                                   | 284                  | 0.8                            | 20               | 2.7                        | 7.0                                 |
| IV                                      | Diseases of the blood and blood forming organs .. .. .               | 522                  | 1.4                            | 11               | 1.5                        | 2.1                                 |
|   | Anaemias .. .. .   | 424                  | 1.2                            | 11               | 1.5                        | 2.6                                 |
| V                                       | Mental disorders .. .. .   | 266                  | 0.7                            | ..               | ..                         | ..                                  |
| VI                                      | Diseases of the nervous system and sense organs .. .. .              | 1,258                | 3.4                            | 44               | 6.0                        | 3.5                                 |
|   | Inflammatory diseases of the eye .. .. .                             | 286                  | 0.8                            | ..               | ..                         | ..                                  |
|   | Otitis media and mastoiditis .. .. .                                 | 365                  | 0.2                            | 3                | 0.4                        | 0.8                                 |
| VII                                     | Diseases of the circulatory system .. .. .                           | 325                  | 0.9                            | 31               | 4.2                        | 9.5                                 |
| VIII                                    | Diseases of the respiratory system .. .. .                           | 10,094               | 27.7                           | 170              | 23.1                       | 1.7                                 |
|   | Pneumonia .. .. .  | 5,650                | 15.5                           | 127              | 17.2                       | 2.2                                 |
|   | Acute upper respiratory tract infections .. .. .                     | 1,190                | 3.3                            | 2                | 0.3                        | 0.2                                 |
| IX                                      | Diseases of the digestive system .. .. .                             | 1,015                | 2.8                            | 38               | 5.2                        | 3.7                                 |
|   | Gastro enteritis and colitis .. .. .                                 | ..                   | ..                             | ..               | ..                         | ..                                  |
| X                                       | Diseases of the genito-urinary system .. .. .                        | 1,060                | 2.9                            | 28               | 3.8                        | 2.6                                 |
| XI                                      | Complications of pregnancy, childbirth and the puerperium .. .. .    | 3,159                | 8.7                            | 8                | 1.1                        | 0.3                                 |
| XII                                     | Diseases of skin and subcutaneous tissues .. .. .                    | 2,067                | 5.7                            | 6                | 0.8                        | 0.3                                 |
|   | Infections of skin and subcutaneous tissue .. .. .                   | 1,255                | 3.4                            | 2                | 0.3                        | 0.2                                 |
| XIII                                    | Diseases of the musculoskeletal system and connective tissue .. .. . | 675                  | 1.8                            | 2                | 0.3                        | 0.3                                 |
| XIV                                     | Congenital anomalies .. .. .   | 110                  | 0.3                            | 13               | 1.8                        | 11.8                                |
| XV                                      | Certain causes of perinatal morbidity and mortality .. .. .          | 74                   | 0.2                            | 56               | 7.6                        | 75.7                                |
| XVI                                     | Symptoms and ill-defined conditions .. .. .                          | 1,624                | 4.4                            | 9                | 1.2                        | 0.6                                 |
| XVII                                    | Accidents, poisonings and violence .. .. .                           | 3,910                | 10.7                           | 39               | 5.3                        | 1.0                                 |
|   |  | 36,447               | 100.0                          | 735              | 100.0                      | 2.0                                 |

APPENDIX XIX—continued

10. INCIDENCE OF PRINCIPAL DISEASES TREATED AND PRINCIPAL CAUSES OF DEATH IN GOVERNMENT HOSPITALS AND IMPORTANT CASE MORTALITY RATES IN PERCENTAGES FOR YEAR ENDED 31 MARCH 1971

Papua

| International classification code group | Disease or injury  | Number of discharges | Percentage of total discharges | Number of deaths | Percentage of total deaths | Death as a percentage of discharges |
|---|--|----------------------|--------------------------------|------------------|----------------------------|-------------------------------------|
| I                                       | Infective and parasitic diseases ..                                  | 10,906               | 27.6                           | 234              | 25.7                       | 2.1                                 |
|   | Malaria .. .. .  | 3,844                | 9.7                            | 38               | 4.1                        | 1.0                                 |
|   | Tuberculosis .. .. .   | 912                  | 2.3                            | 54               | 5.9                        | 5.9                                 |
|   | Leprosy .. .. .  | 396                  | 1.0                            | 6                | 0.6                        | 1.5                                 |
|   | Enteritis, and other diarrhoeal diseases .. .. .                     | 3,956                | 10.1                           | 68               | 7.3                        | 1.7                                 |
|   | Diseases due to helminths .. .. .                                    | 314                  | 0.8                            | 4                | 0.4                        | 1.3                                 |
| II                                      | Neoplasms .. .. .  | 326                  | 0.8                            | 59               | 6.5                        | 18.1                                |
|   | Malignant neoplasms .. .. .  | 152                  | 0.4                            | 53               | 5.8                        | 34.9                                |
|   | Benign neoplasms .. .. .   | 174                  | 0.4                            | 6                | 0.6                        | 3.4                                 |
| III                                     | Endocrine, nutritional and metabolic diseases .. .. .                | 535                  | 1.3                            | 30               | 3.3                        | 5.6                                 |
|   | Avitaminosis, malnutrition .. .. .                                   | 465                  | 1.1                            | 25               | 2.7                        | 5.4                                 |
| IV                                      | Diseases of the blood and blood forming organs .. .. .               | 690                  | 1.7                            | 16               | 1.8                        | 2.3                                 |
|   | Anaemias .. .. .   | 581                  | 1.5                            | 16               | 1.7                        | 2.8                                 |
| V                                       | Mental disorders .. .. .   | 472                  | 1.2                            | 3                | 0.3                        | 0.6                                 |
| VI                                      | Diseases of the nervous system and sense organs .. .. .              | 1,199                | 3.0                            | 56               | 6.2                        | 4.7                                 |
|   | Inflammatory diseases of the eye .. .. .                             | 332                  | 0.8                            | 1                | 0.1                        | 0.3                                 |
|   | Otitis media and mastoiditis .. .. .                                 | 327                  | 0.8                            | ..               | ..                         | ..                                  |
| VII                                     | Diseases of the circulatory system .. .. .                           | 362                  | 0.9                            | 38               | 4.2                        | 10.5                                |
| VIII                                    | Diseases of the respiratory system .. .. .                           | 9,805                | 24.9                           | 198              | 21.8                       | 2.0                                 |
|   | Pneumonia .. .. .  | 5,233                | 13.3                           | 138              | 15.1                       | 2.6                                 |
|   | Acute upper respiratory tract infections .. .. .                     | 955                  | 2.4                            | 4                | 0.4                        | 0.4                                 |
| IX                                      | Diseases of the digestive system .. .. .                             | 926                  | 2.3                            | 38               | 4.2                        | 4.1                                 |
|   | Gastro enteritis and colitis .. .. .                                 | ..                   | ..                             | ..               | ..                         | ..                                  |
| X                                       | Diseases of the genito-urinary system .. .. .                        | 1,143                | 2.9                            | 28               | 3.0                        | 2.4                                 |
| XI                                      | Complications of pregnancy, childbirth and the puerperium .. .. .    | 4,007                | 10.2                           | 23               | 2.5                        | 0.6                                 |
|   | Diseases of skin and subcutaneous tissues .. .. .                    | 2,204                | 5.6                            | 8                | 0.9                        | 0.4                                 |
| XIII                                    | Infections of skin and subcutaneous tissue .. .. .                   | 1,438                | 3.6                            | 8                | 0.9                        | 0.5                                 |
|   | Diseases of the musculoskeletal system and connective tissue .. .. . | 819                  | 2.1                            | 4                | 0.5                        | 0.5                                 |
| XIV                                     | Congenital anomalies .. .. .   | 140                  | 0.3                            | 32               | 3.5                        | 22.8                                |
| XV                                      | Certain causes of perinatal morbidity and mortality .. .. .          | ..                   | ..                             | 101              | 11.1                       | ..                                  |
| XVI                                     | Symptoms and ill-defined conditions .. .. .                          | 1,600                | 4.1                            | 6                | 0.7                        | 0.4                                 |
| XVII                                    | Accidents, poisonings and violence .. .. .                           | 4,255                | 10.8                           | 36               | 4.0                        | 0.8                                 |
|   |  | 39,389               | 100.0                          | 910              | 100.0                      | 2.3                                 |

Note: Figures for Papua for year ended 31 March 1972 are not yet available.



APPENDIX XIX—continued

10. INCIDENCE OF PRINCIPAL DISEASES TREATED AND PRINCIPAL CAUSES OF DEATH IN GOVERNMENT HOSPITALS AND IMPORTANT CASE MORTALITY RATES IN PERCENTAGES FOR YEAR ENDED 31 MARCH 1970

New Guinea

| International classification code group | Disease or injury   | Number of discharges | Percentage of total discharges | Number of deaths | Percentage of total deaths | Death as a percentage of discharges |
|---|---|----------------------|--------------------------------|------------------|----------------------------|-------------------------------------|
| I                                       | <i>Infective and parasitic diseases</i> ..  | 23,426               | 24.1                           | 456              | 21.6                       | 2.0                                 |
|   | Malaria .. .. .   | 7,191                | 7.4                            | 93               | 4.4                        | 1.3                                 |
|   | Tuberculosis .. ..  | 1,474                | 1.5                            | 77               | 3.6                        | 5.2                                 |
|   | Leprosy .. .. .   | 1,023                | 1.1                            | 14               | 0.7                        | 1.4                                 |
|   | Diarrhoeal disease .. ..  | 8,571                | 8.8                            | 164              | 8.0                        | 2.0                                 |
|   | Diseases due to helminths .. ..   | 624                  | 0.6                            | 1                | 0.05                       | 0.2                                 |
| II                                      | <i>Neoplasms</i> .. .. .  | 840                  | 0.9                            | 134              | 6.3                        | 16.0                                |
|   | Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissue .. .. | 519                  | 0.5                            | 114              | 3.5                        | 22.0                                |
|   | Benign neoplasms and neoplasms of unspecified nature .. ..                            | 321                  | 0.3                            | 20               | 0.9                        | 6.2                                 |
| III                                     | <i>Endocrine nutritional and metabolic diseases</i> .. ..                             | 1,623                | 1.7                            | 94               | 4.4                        | 5.8                                 |
|   | Avitaminosis, and other nutritional deficiency .. ..                                  | 1,404                | 1.4                            | 85               | 4.0                        | 6.0                                 |
| IV                                      | <i>Diseases of the blood and blood-forming organs</i> .. ..                           | 1,546                | 1.6                            | 36               | 1.7                        | 2.3                                 |
|   | Anaemias .. .. .  | 1,266                | 1.3                            | 34               | 1.6                        | 2.7                                 |
| V                                       | <i>Mental disorders</i> .. ..   | 532                  | 0.5                            | 2                | 0.1                        | 0.4                                 |
| VI                                      | <i>Diseases of the nervous system and sense organs</i> .. ..                          | 3,189                | 3.3                            | 166              | 7.9                        | 5.2                                 |
|   | Inflammatory diseases of the eye .. ..  | 810                  | 0.8                            | ..               | ..                         | ..                                  |
|   | Otitis media and mastoiditis .. ..  | 902                  | 0.9                            | 9                | 0.4                        | 1.0                                 |
| VII                                     | <i>Diseases of the circulatory system</i> .. ..                                       | 682                  | 0.7                            | 95               | 4.5                        | 14.0                                |
| VIII                                    | <i>Diseases of the respiratory system</i> .. ..                                       | 25,882               | 26.6                           | 509              | 24.1                       | 2.0                                 |
|   | Pneumonia .. .. .   | 13,388               | 13.8                           | 332              | 15.7                       | 2.5                                 |
|   | Acute upper respiratory tract infections .. ..  | 2,769                | 2.8                            | 52               | 2.5                        | 1.9                                 |
| IX                                      | <i>Diseases of the digestive system</i> .. ..   | 2,332                | 2.4                            | 96               | 4.6                        | 4.1                                 |
| X                                       | <i>Diseases of the genito-urinary system</i> .. ..                                    | 2,985                | 3.1                            | 81               | 3.8                        | 2.7                                 |
| XI                                      | <i>Complications of pregnancy, childbirth and the puerperium</i> .. ..                | 9,367                | 9.6                            | 47               | 2.2                        | 0.5                                 |
| XII                                     | <i>Diseases of the skin and subcutaneous tissue</i> .. ..                             | 6,143                | 6.3                            | 13               | 0.6                        | 0.2                                 |
|   | Infections of skin and subcutaneous tissue .. ..                                      | 3,745                | 4.0                            | 11               | 0.5                        | 0.3                                 |
| XIII                                    | <i>Diseases of the musculoskeletal system and connective tissue</i> .. ..             | 1,950                | 2.0                            | 11               | 0.5                        | 0.6                                 |
| XIV                                     | <i>Congenital anomalies</i> .. ..   | 253                  | 0.2                            | 59               | 2.8                        | 23.3                                |
| XV                                      | <i>Certain causes of perinatal morbidity and mortality</i> .. ..                      | 320                  | 0.3                            | 206              | 9.8                        | 64.4                                |
| XVI                                     | <i>Symptoms and ill-defined conditions</i> .. ..                                      | 3,664                | 3.8                            | 24               | 1.1                        | 0.7                                 |
| XVII                                    | <i>Accidents, poisonings and violence</i> .. ..                                       | 10,665               | 11.0                           | 79               | 3.8                        | 0.7                                 |
|   | Supplementary classifications .. ..   | 1,860                | 1.9                            | ..               | ..                         | ..                                  |
|   | <b>All Causes</b> .. ..   | <b>97,259</b>        | <b>100.0</b>                   | <b>2,108</b>     | <b>100.0</b>               | <b>2.2</b>                          |

APPENDIX XIX—continued

10. INCIDENCE OF PRINCIPAL DISEASES TREATED AND PRINCIPAL CAUSES OF DEATH IN GOVERNMENT HOSPITALS AND IMPORTANT CASE MORTALITY RATES IN PERCENTAGES FOR YEAR ENDED 31 MARCH 1971

New Guinea

| International classification code group | Disease or injury   | Number of discharges | Percentage of total discharges | Number of deaths | Percentage of total deaths | Death as a percentage of discharges |
|---|---|----------------------|--------------------------------|------------------|----------------------------|-------------------------------------|
| I                                       | Infective and parasitic diseases ..   | 28,128               | 26.5                           | 646              | 28.6                       | 2.3                                 |
|   | Malaria .. .. .   | 8,490                | 8.0                            | 101              | 4.5                        | 1.1                                 |
|   | Tuberculosis .. .. .  | 1,532                | 1.4                            | 74               | 3.3                        | 4.8                                 |
|   | Leprosy .. .. .   | 896                  | 0.8                            | 8                | 0.3                        | 0.9                                 |
|   | Diarrhoeal disease .. .. .  | 9,562                | 9.0                            | 259              | 11.4                       | 2.7                                 |
|   | Diseases due to helminths .. .. .   | 953                  | 0.9                            | 5                | 0.2                        | 0.5                                 |
| II                                      | Neoplasms .. .. .   | 929                  | 0.9                            | 143              | 6.3                        | 15.4                                |
|   | Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissue .. .. . | 523                  | 0.5                            | 129              | 5.7                        | 24.7                                |
|   | Benign neoplasms and neoplasms of unspecified nature .. .. .                            | 406                  | 0.4                            | 14               | 0.6                        | 3.4                                 |
| III                                     | Endocrine nutritional and metabolic diseases .. .. .                                    | 1,544                | 1.4                            | 68               | 3.0                        | 4.4                                 |
|   | Avitaminosis, and other nutritional deficiency .. .. .                                  | 1,369                | 1.3                            | 55               | 2.4                        | 4.0                                 |
| IV                                      | Diseases of the blood and blood-forming organs .. .. .                                  | 2,081                | 2.0                            | 26               | 1.2                        | 1.2                                 |
|   | Anaemias .. .. .  | 1,748                | 1.6                            | 26               | 1.2                        | 1.5                                 |
| V                                       | Mental disorders .. .. .  | 655                  | 0.6                            | 3                | 0.1                        | 0.5                                 |
| VI                                      | Diseases of the nervous system and sense organs .. .. .                                 | 3,432                | 3.2                            | 151              | 6.7                        | 4.4                                 |
|   | Inflammatory diseases of the eye .. .. .  | 955                  | 0.9                            | ..               | ..                         | ..                                  |
|   | Otitis media and mastoiditis .. .. .  | 869                  | 0.8                            | 9                | 0.4                        | 1.0                                 |
| VII                                     | Diseases of the circulatory system .. .. .  | 851                  | 0.8                            | 104              | 4.6                        | 12.2                                |
| VIII                                    | Diseases of the respiratory system .. .. .  | 22,675               | 21.4                           | 488              | 21.6                       | 2.2                                 |
|   | Pneumonia .. .. .   | 11,914               | 11.2                           | 299              | 13.2                       | 2.5                                 |
|   | Acute upper respiratory tract infections .. .. .  | 3,241                | 3.1                            | 85               | 3.8                        | 2.6                                 |
| IX                                      | Diseases of the digestive system .. .. .  | 3,130                | 3.0                            | 111              | 4.9                        | 3.5                                 |
| X                                       | Diseases of the genito-urinary system .. .. .   | 3,708                | 3.5                            | 74               | 3.3                        | 2.0                                 |
| XI                                      | Complications of pregnancy, childbirth and the puerperium .. .. .                       | 10,773               | 10.1                           | 55               | 2.4                        | 0.5                                 |
| XII                                     | Diseases of the skin and subcutaneous tissue .. .. .                                    | 7,011                | 6.6                            | 15               | 0.7                        | 0.2                                 |
|   | Infections of skin and subcutaneous tissue .. .. .                                      | 4,037                | 3.8                            | 13               | 0.6                        | 0.3                                 |
| XIII                                    | Diseases of the musculoskeletal system and connective tissue .. .. .                    | 2,347                | 2.2                            | 5                | 0.2                        | 0.2                                 |
| XIV                                     | Congenital anomalies .. .. .  | 245                  | 0.2                            | 62               | 2.7                        | 25.3                                |
| XV                                      | Certain causes of perinatal morbidity and mortality .. .. .                             | ..                   | ..                             | 211              | 9.3                        | ..                                  |
| XVI                                     | Symptoms and ill-defined conditions .. .. .   | 4,418                | 4.2                            | 10               | 0.4                        | 0.2                                 |
| XVII                                    | Accidents, poisonings and violence .. .. .  | 11,658               | 11.0                           | 89               | 3.9                        | 0.8                                 |
|   | Supplementary classifications .. .. .   | 2,498                | 2.4                            | ..               | ..                         | ..                                  |
|   | All Causes .. .. .  | 106,083              | 100.0                          | 2,261            | 100.0                      | 2.1                                 |

Note: Figures for New Guinea for year ended 31 March 1972 are not yet available.

## APPENDIX XIX—continued

II. NUMBER OF IN-PATIENTS TREATED AND DEATHS RECORDED BY DISEASE GROUPS IN  
GOVERNMENT HOSPITALS DURING YEAR ENDED 31 MARCH 1972

## Papua

| Code No. | Disease, injury, etc.  | In-patients | Deaths |
|----------|--|-------------|--------|
| A1       | Cholera .. .. .  | ..          | ..     |
| A2       | Typhoid fever .. .. .  | ..          | ..     |
| A3       | Paratyphoid fever and other salmonella infections .. .. .            | ..          | ..     |
| A4       | Bacillary dysentery and amoebiasis .. .. .                           | 166         | 12     |
| A5       | Enteritis, and other diarrhoeal diseases .. .. .                     | 3,956       | 68     |
| A6       | Tuberculosis of respiratory system .. .. .                           | 690         | 42     |
| A7       | Tuberculosis of meninges and central nervous system .. .. .          | 21          | 6      |
| A8       | Tuberculosis of intestines, peritoneum and mesenteric glands .. .. . | 39          | 3      |
| A9       | Tuberculosis of bones and joints .. .. .                             | 44          | ..     |
| A10      | Other tuberculosis, including late effects .. .. .                   | 118         | 3      |
| A11      | Plague .. .. .   | ..          | ..     |
| A12      | Anthrax .. .. .  | ..          | ..     |
| A13      | Brucellosis .. .. .  | ..          | ..     |
| A14      | Leprosy .. .. .  | 396         | 6      |
| A15      | Diphtheria .. .. .   | ..          | ..     |
| A16      | Whooping cough .. .. .   | 74          | 2      |
| A17      | Streptococcal sore throat and scarlet fever .. .. .                  | ..          | ..     |
| A18      | Erysipelas .. .. .   | 24          | ..     |
| A19      | Meningococcal infection .. .. .                                      | 6           | 3      |
| A20      | Tetanus .. .. .  | 29          | 13     |
| A21      | Other bacterial diseases .. .. .                                     | 138         | 19     |
| A22      | Acute poliomyelitis .. .. .  | 26          | ..     |
| A23      | Late effects of acute poliomyelitis .. .. .                          | 1           | ..     |
| A24      | Smallpox .. .. .   | ..          | ..     |
| A25      | Measles .. .. .  | 213         | 3      |
| A26      | Yellow fever .. .. .   | ..          | ..     |
| A27      | Viral encephalitis .. .. .   | ..          | ..     |
| A28      | Infectious hepatitis .. .. .   | 106         | 4      |
| A29      | Other viral diseases .. .. .   | 318         | 6      |
| A30      | Typhus and other rickettsiosis .. .. .                               | ..          | ..     |
| A31      | Malaria .. .. .  | 3,844       | 38     |
| A32      | Trypanosomiasis .. .. .  | ..          | ..     |
| A33      | Relapsing fever .. .. .  | ..          | ..     |
| A34      | Congenital syphilis .. .. .  | ..          | ..     |
| A35      | Early syphilis, symptomatic .. .. .                                  | ..          | ..     |
| A36      | Syphilis of central nervous system .. .. .                           | ..          | ..     |
| A37      | Other syphilis .. .. .   | 6           | ..     |
| A38      | Gonococcal infections .. .. .  | 133         | ..     |
| A39      | Schistosomiasis .. .. .  | ..          | ..     |
| A40      | Hydatidosis .. .. .  | ..          | ..     |
| A41      | Filarial infection .. .. .   | 8           | ..     |
| A42      | Ancylostomiasis .. .. .  | 34          | 1      |
| A43      | Other helminthiases .. .. .  | 272         | 3      |
| A44      | All other infective and parasitic diseases .. .. .                   | 244         | 2      |
| A45      | Malignant neoplasm of buccal cavity and pharynx .. .. .              | 8           | 2      |
| A46      | Malignant neoplasm of oesophagus .. .. .                             | ..          | ..     |
| A47      | Malignant neoplasm of stomach .. .. .                                | 16          | ..     |
| A48      | Malignant neoplasm of intestines, except rectum .. .. .              | 1           | 1      |
| A49      | Malignant neoplasm of rectum and rectosigmoid junction .. .. .       | 2           | 1      |
| A50      | Malignant neoplasm of larynx .. .. .                                 | 6           | ..     |
| A51      | Malignant neoplasm of trachea, bronchus and lung .. .. .             | 2           | 5      |
| A52      | Malignant neoplasm of bone .. .. .                                   | 2           | ..     |
| A53      | Malignant neoplasm of skin .. .. .                                   | 18          | 2      |
| A54      | Malignant neoplasm of breast .. .. .                                 | 11          | ..     |
| A55      | Malignant neoplasm of cervix uteri .. .. .                           | 11          | 4      |
| A56      | Other malignant neoplasm of uterus .. .. .                           | 1           | 3      |
| A57      | Malignant neoplasm of prostate .. .. .                               | ..          | ..     |
| A58      | Malignant neoplasm of other and unspecified sites .. .. .            | 56          | 23     |
| A59      | Leukemia .. .. .   | 6           | 6      |
| A60      | Other neoplasms of lymphatic and haematopoietic tissue .. .. .       | 12          | 6      |
| A61      | Benign neoplasms and neoplasms of unspecified nature .. .. .         | 174         | 6      |
| A62      | Non-toxic goitre .. .. .   | 14          | ..     |
| A63      | Thyrotoxicosis with or without goitre .. .. .                        | ..          | ..     |

APPENDIX XIX—continued

11. NUMBER OF IN-PATIENTS TREATED AND DEATHS RECORDED BY DISEASE GROUPS IN GOVERNMENT HOSPITALS DURING YEAR ENDED 31 MARCH 1972—continued

Papua

| Code No. | Disease, injury, etc.  | In-patients | Deaths |
|----------|--|-------------|--------|
| A64      | Diabetes mellitus .. .. .  | 30          | ..     |
| A65      | Avitaminoses and other nutritional deficiency .. .. .                            | 465         | 25     |
| A66      | Other endocrine and metabolic diseases .. .. .                                   | 26          | 5      |
| A67      | Anaemias .. .. .   | 581         | 16     |
| A68      | Other diseases of blood and blood-forming organs .. .. .                         | 109         | ..     |
| A69      | Psychoses .. .. .  | 285         | 2      |
| A70      | Neuroses, personality disorders and other non-psychotic mental disorders .. .. . | 187         | 1      |
| A71      | Mental retardation .. .. .   | ..          | ..     |
| A72      | Meningitis .. .. .   | 223         | 41     |
| A73      | Multiple sclerosis .. .. .   | ..          | ..     |
| A74      | Epilepsy .. .. .   | 68          | ..     |
| A75      | Inflammatory diseases of eye .. .. .   | 332         | 1      |
| A76      | Cataract .. .. .   | 56          | ..     |
| A77      | Glaucoma .. .. .   | 6           | ..     |
| A78      | Otitis media and mastoiditis .. .. .   | 327         | ..     |
| A79      | Other diseases of nervous system and sense organs .. .. .                        | 187         | 14     |
| A80      | Active rheumatic fever .. .. .   | 24          | 1      |
| A81      | Chronic rheumatic heart disease .. .. .  | 17          | 1      |
| A82      | Hypertensive disease .. .. .   | 64          | 1      |
| A83      | Ischaemic heart disease .. .. .  | 56          | 7      |
| A84      | Other forms of heart disease .. .. .   | 82          | 12     |
| A85      | Cerebrovascular disease .. .. .  | 43          | 12     |
| A86      | Diseases of arteries, arterioles and capillaries .. .. .                         | 6           | 1      |
| A87      | Venous thrombosis and embolism .. .. .   | 11          | 2      |
| A88      | Other diseases of circulatory system .. .. .                                     | 59          | 1      |
| A89      | Acute respiratory infections .. .. .   | 955         | 4      |
| A90      | Influenza .. .. .  | 613         | 7      |
| A91      | Viral pneumonia .. .. .  | 10          | 4      |
| A92      | Other pneumonia .. .. .  | 5,223       | 134    |
| A93      | Bronchitis, emphysema and asthma .. .. .   | 2,071       | 20     |
| A94      | Hypertrophy of tonsils and adenoids .. .. .                                      | 48          | ..     |
| A95      | Empyema and abscess of lung .. .. .  | 18          | 4      |
| A96      | Other diseases of respiratory system .. .. .                                     | 867         | 25     |
| A97      | Diseases of teeth and supporting structures .. .. .                              | 114         | 1      |
| A98      | Peptic ulcer .. .. .   | 116         | 2      |
| A99      | Gastritis and duodenitis .. .. .   | 108         | ..     |
| A100     | Appendicitis .. .. .   | 91          | 2      |
| A101     | Intestinal obstruction and hernia .. .. .  | 142         | 6      |
| A102     | Cirrhosis of liver .. .. .   | 40          | 8      |
| A103     | Cholelithiasis and cholecystitis .. .. .   | 12          | ..     |
| A104     | Other diseases of digestive system .. .. .                                       | 303         | 19     |
| A105     | Acute nephritis .. .. .  | 3           | 1      |
| A106     | Other nephritis and nephrosis .. .. .  | 122         | 21     |
| A107     | Infections of kidney .. .. .   | 46          | 1      |
| A108     | Calculus of urinary system .. .. .   | 26          | ..     |
| A109     | Hyperplasia of prostate .. .. .  | 4           | ..     |
| A110     | Diseases of breast .. .. .   | 101         | ..     |
| A111     | Other diseases of genito-urinary system .. .. .                                  | 841         | 5      |
| A112     | Toxaemias of pregnancy and the puerperium .. .. .                                | 99          | 1      |
| A113     | Haemorrhage of pregnancy and childbirth .. .. .                                  | 292         | 9      |
| A114     | Abortion induced for legal indications .. .. .                                   | ..          | ..     |
| A115     | Other and unspecified abortion .. .. .   | 324         | 2      |
| A116     | Sepsis of childbirth and the puerperium .. .. .                                  | 70          | 4      |
| A117     | Other complications of pregnancy, childbirth and the puerperium .. .. .          | 661         | 7      |
| A118     | Delivery without mention of complication .. .. .                                 | 2,561       | ..     |
| A119     | Infections of skin and subcutaneous tissue .. .. .                               | 1,438       | 8      |
| A120     | Other diseases of skin and subcutaneous tissue .. .. .                           | 766         | ..     |
| A121     | Arthritis and spondylitis .. .. .  | 397         | 2      |
| A122     | Non-articular rheumatism and rheumatism unspecified .. .. .                      | 80          | ..     |
| A123     | Osteomyelitis and periostitis .. .. .  | 104         | 1      |
| A124     | Ankylosis and acquired musculoskeletal deformities .. .. .                       | 9           | ..     |

APPENDIX XIX—continued

11. NUMBER OF IN-PATIENTS TREATED AND DEATHS RECORDED BY DISEASE GROUPS IN GOVERNMENT HOSPITALS DURING YEAR ENDED 31 MARCH 1972—continued

Papua

| Code No. | Disease, injury, etc.   | In-patients | Deaths |
|----------|---|-------------|--------|
| A125     | Other diseases of musculoskeletal system and connective tissue .. .. .      | 229         | 1      |
| A126     | Spina bifida .. .. .  | ..          | 1      |
| A127     | Congenital anomalies of heart .. .. .                                       | 41          | 13     |
| A128     | Other congenital anomalies of circulatory system .. .. .                    | 2           | 2      |
| A129     | Cleft palate and cleft lip .. .. .  | 27          | 1      |
| A130     | All other congenital anomalies .. .. .                                      | 70          | 15     |
| A131     | Birth injury and difficult labour .. .. .                                   | ..          | 16     |
| A132     | Conditions of placenta and cord .. .. .                                     | ..          | 6      |
| A133     | Haemolytic disease of newborn .. .. .                                       | ..          | 1      |
| A134     | Anoxic and hypoxic conditions not elsewhere classified .. .. .              | ..          | 15     |
| A135     | Other causes of perinatal morbidity and mortality .. .. .                   | ..          | 63     |
| A136     | Senility without mention of psychosis .. .. .                               | ..          | ..     |
| A137     | Symptoms and other ill-defined conditions .. .. .                           | 1,600       | 6      |
| AN138    | Fracture of skull .. .. .   | 97          | 9      |
| AN139    | Fracture of spine and trunk .. .. .   | 33          | 1      |
| AN140    | Fracture of limbs .. .. .   | 671         | ..     |
| AN141    | Dislocation without fracture .. .. .  | 72          | ..     |
| AN142    | Sprains and strains of joints and adjacent muscle .. .. .                   | 101         | ..     |
| AN143    | Head injury (including fracture) .. .. .                                    | 433         | 7      |
| AN144    | Internal injury of chest, abdomen and pelvis .. .. .                        | 19          | 5      |
| AN145    | Laceration and open wounds .. .. .  | 1,439       | ..     |
| AN146    | Superficial injury, contusion and crushing with intact skin surface .. .. . | 243         | ..     |
| AN147    | Effects of foreign body entering through orifice .. .. .                    | 46          | ..     |
| AN148    | Burns .. .. .   | 433         | 6      |
| AN149    | Effects of poison .. .. .   | 416         | 3      |
| AN150    | All other and unspecified effects of external causes .. .. .                | 252         | 5      |
|          | Total .. .. .   | 39,389      | 910    |

Note: Figures for Papua for year ended 31 March 1971 were published in the 1970-71 Papua New Guinea Report.

APPENDIX XIX—*continued*

11. NUMBER OF IN-PATIENTS TREATED AND DEATHS RECORDED BY DISEASE GROUPS IN GOVERNMENT HOSPITALS DURING YEAR ENDED 31 MARCH 1971—*continued*

*New Guinea*

| Code No. | Disease, injury, etc.  | In-patients | Deaths |
|----------|--|-------------|--------|
| A1       | Cholera .. .. .  | ..          | ..     |
| A2       | Typhoid fever .. .. .  | ..          | ..     |
| A3       | Paratyphoid fever and other salmonella infections .. .. .            | 5           | ..     |
| A4       | Bacillary dysentery and amoebiasis .. .. .                           | 119         | 16     |
| A5       | Enteritis, and other diarrhoeal diseases .. .. .                     | 8,696       | 162    |
| A6       | Tuberculosis of respiratory system .. .. .                           | 1,197       | 56     |
| A7       | Tuberculosis of meninges and central nervous system .. .. .          | 29          | 8      |
| A8       | Tuberculosis of intestines, peritoneum and mesenteric glands .. .. . | 2           | 2      |
| A9       | Tuberculosis of bones and joints .. .. .                             | 71          | 1      |
| A10      | Other tuberculosis, including late effects .. .. .                   | 175         | 10     |
| A11      | Plague .. .. .   | ..          | ..     |
| A12      | Anthrax .. .. .  | ..          | ..     |
| A13      | Brucellosis .. .. .  | ..          | ..     |
| A14      | Leprosy .. .. .  | 1,023       | 14     |
| A15      | Diphtheria .. .. .   | ..          | ..     |
| A16      | Whooping cough .. .. .   | ..          | ..     |
| A17      | Streptococcal sore throat and scarlet fever .. .. .                  | ..          | ..     |
| A18      | Erysipelas .. .. .   | ..          | ..     |
| A19      | Meningococcal infection .. .. .                                      | 58          | 9      |
| A20      | Tetanus .. .. .  | 48          | 12     |
| A21      | Other bacterial diseases .. .. .                                     | 267         | 47     |
| A22      | Acute poliomyelitis .. .. .  | 24          | ..     |
| A23      | Late effects of acute poliomyelitis .. .. .                          | 8           | ..     |
| A24      | Smallpox .. .. .   | ..          | ..     |
| A25      | Measles .. .. .  | 741         | 6      |
| A26      | Yellow fever .. .. .   | ..          | ..     |
| A27      | Viral encephalitis .. .. .   | 8           | 1      |
| A28      | Infectious hepatitis .. .. .   | 162         | 6      |
| A29      | Other viral diseases .. .. .   | 719         | 8      |
| A30      | Typhus and other rickettsiosis .. .. .                               | 17          | ..     |
| A31      | Malaria .. .. .  | 7,191       | 93     |
| A32      | Trypanosomiasis .. .. .  | ..          | ..     |
| A33      | Relapsing fever .. .. .  | ..          | ..     |
| A34      | Congenital syphilis .. .. .  | ..          | ..     |
| A35      | Early syphilis, symptomatic .. .. .                                  | 6           | ..     |
| A36      | Syphilis of central nervous system .. .. .                           | ..          | ..     |
| A37      | Other syphilis .. .. .   | 70          | ..     |
| A38      | Gonococcal infections .. .. .  | 770         | ..     |
| A39      | Schistosomiasis .. .. .  | ..          | ..     |
| A40      | Hydatidosis .. .. .  | ..          | ..     |
| A41      | Filarial infection .. .. .   | 57          | ..     |
| A42      | Ancylostomiasis .. .. .  | 188         | ..     |
| A43      | Other helminthiasis .. .. .  | 379         | 1      |
| A44      | All other infective and parasitic diseases .. .. .                   | 1,396       | 4      |
| A45      | Malignant neoplasm of buccal cavity and pharynx .. .. .              | 64          | 3      |
| A46      | Malignant neoplasm of oesophagus .. .. .                             | 7           | 3      |
| A47      | Malignant neoplasm of stomach .. .. .                                | 25          | 8      |
| A48      | Malignant neoplasm of intestines, except rectum .. .. .              | ..          | 5      |
| A49      | Malignant neoplasm of rectum and rectosigmoid junction .. .. .       | 24          | 1      |
| A50      | Malignant neoplasm of larynx .. .. .                                 | 4           | 1      |
| A51      | Malignant neoplasm of trachea, bronchus and lung .. .. .             | ..          | 4      |
| A52      | Malignant neoplasm of bone .. .. .                                   | 18          | 3      |
| A53      | Malignant neoplasm of skin .. .. .                                   | 53          | 5      |
| A54      | Malignant neoplasm of breast .. .. .                                 | 31          | 2      |
| A55      | Malignant neoplasm of cervix uteri .. .. .                           | 35          | 2      |
| A56      | Other malignant neoplasm of uterus .. .. .                           | 5           | 3      |
| A57      | Malignant neoplasm of prostate .. .. .                               | 7           | 1      |
| A58      | Malignant neoplasm of other and unspecified sites .. .. .            | 212         | 46     |
| A59      | Leukemia .. .. .   | 17          | 16     |
| A60      | Other neoplasms of lymphatic and haematopoietic tissue .. .. .       | 17          | 11     |
| A61      | Benign neoplasms and neoplasms of unspecified nature .. .. .         | 321         | 20     |
| A62      | Non-toxic goitre .. .. .   | 87          | ..     |
| A63      | Thyrotoxicosis with or without goitre .. .. .                        | 4           | ..     |

APPENDIX XIX—continued

11. NUMBER OF IN-PATIENTS TREATED AND DEATHS RECORDED BY DISEASE GROUPS IN GOVERNMENT HOSPITALS DURING YEAR ENDED 31 MARCH 1971—continued  
New Guinea

| Code No. | Disease, injury, etc.  | In-patients | Deaths |
|----------|--|-------------|--------|
| A64      | Diabetes mellitus .. .. .  | 35          | 4      |
| A65      | Avitaminoses and other nutritional deficiency .. .. .                            | 1,404       | 85     |
| A66      | Other endocrine and metabolic diseases .. .. .                                   | 93          | 5      |
| A67      | Anaemias .. .. .   | 1,266       | 34     |
| A68      | Other diseases of blood and blood-forming organs .. .. .                         | 280         | 2      |
| A69      | Psychoses .. .. .  | 255         | 2      |
| A70      | Neuroses, personality disorders and other non-psychotic mental disorders .. .. . | 266         | ..     |
| A71      | Mental retardation .. .. .   | 11          | ..     |
| A72      | Meningitis .. .. .   | 478         | 109    |
| A73      | Multiple sclerosis .. .. .   | 4           | ..     |
| A74      | Epilepsy .. .. .   | 190         | 7      |
| A75      | Inflammatory diseases of eye .. .. .   | 810         | ..     |
| A76      | Cataract .. .. .   | ..          | ..     |
| A77      | Glaucoma .. .. .   | 5           | ..     |
| A78      | Otitis media and mastoiditis .. .. .   | 902         | 9      |
| A79      | Other diseases of nervous system and sense organs .. .. .                        | 800         | 41     |
| A80      | Active rheumatic fever .. .. .   | 44          | ..     |
| A81      | Chronic rheumatic heart disease .. .. .  | 25          | 12     |
| A82      | Hypertensive disease .. .. .   | 57          | 3      |
| A83      | Ischaemic heart disease .. .. .  | 54          | 9      |
| A84      | Other forms of heart disease .. .. .   | 306         | 39     |
| A85      | Cerebrovascular disease .. .. .  | 36          | 17     |
| A86      | Diseases of arteries, arterioles and capillaries .. .. .                         | 52          | 8      |
| A87      | Venous thrombosis and embolism .. .. .   | 16          | 3      |
| A88      | Other diseases of circulatory system .. .. .                                     | 92          | 4      |
| A89      | Acute respiratory infections .. .. .   | 2,796       | 52     |
| A90      | Influenza .. .. .  | 3,648       | 27     |
| A91      | Viral pneumonia .. .. .  | 10          | ..     |
| A92      | Other pneumonia .. .. .  | 13,378      | 332    |
| A93      | Bronchitis, emphysema and asthma .. .. .   | 5,555       | 74     |
| A94      | Hypertrophy of tonsils and adenoids .. .. .                                      | 49          | ..     |
| A95      | Empyema and abscess of lung .. .. .  | 31          | 4      |
| A96      | Other diseases of respiratory system .. .. .                                     | 415         | 20     |
| A97      | Diseases of teeth and supporting structures .. .. .                              | 573         | ..     |
| A98      | Peptic ulcer .. .. .   | 195         | 12     |
| A99      | Gastritis and duodenitis .. .. .   | 276         | 1      |
| A100     | Appendicitis .. .. .   | 161         | 2      |
| A101     | Intestinal obstruction and hernia .. .. .  | 319         | 16     |
| A102     | Cirrhosis of liver .. .. .   | 89          | 37     |
| A103     | Cholelithiasis and cholecystitis .. .. .   | 22          | 1      |
| A104     | Other diseases of digestive system .. .. .                                       | 697         | 27     |
| A105     | Acute nephritis .. .. .  | 17          | 1      |
| A106     | Other nephritis and nephrosis .. .. .  | 163         | 54     |
| A107     | Infections of kidney .. .. .   | 140         | 3      |
| A108     | Calculus of urinary system .. .. .   | 22          | ..     |
| A109     | Hyperplasia of prostate .. .. .  | 13          | 2      |
| A110     | Diseases of breast .. .. .   | 333         | ..     |
| A111     | Other diseases of genito-urinary system .. .. .                                  | 2,297       | 21     |
| A112     | Toxaemias of pregnancy and the puerperium .. .. .                                | 132         | 3      |
| A113     | Haemorrhage of pregnancy and childbirth .. .. .                                  | 586         | 13     |
| A114     | Abortion induced for legal indications .. .. .                                   | ..          | ..     |
| A115     | Other and unspecified abortion .. .. .   | 627         | 4      |
| A116     | Sepsis of childbirth and the puerperium .. .. .                                  | 79          | 7      |
| A117     | Other complications of pregnancy, childbirth and the puerperium .. .. .          | 863         | 20     |
| A118     | Delivery without mention of complication .. .. .                                 | 7,080       | ..     |
| A119     | Infections of skin and subcutaneous tissue .. .. .                               | 3,745       | 11     |
| A120     | Other diseases of skin and subcutaneous tissue .. .. .                           | 2,398       | 2      |
| A121     | Arthritis and spondylitis .. .. .  | 955         | ..     |
| A122     | Non-articular rheumatism and rheumatism unspecified .. .. .                      | 197         | 2      |
| A123     | Osteomyelitis and periostitis .. .. .  | 293         | 9      |
| A124     | Ankylosis and acquired musculoskeletal deformities .. .. .                       | 18          | ..     |

APPENDIX XIX—*continued*

11. NUMBER OF IN-PATIENTS TREATED AND DEATHS RECORDED BY DISEASE GROUPS IN GOVERNMENT HOSPITALS DURING YEAR ENDED 31 MARCH 1971—*continued*

*New Guinea*

| Code No. | Disease, injury, etc.   | In-patients | Deaths |
|----------|---|-------------|--------|
| A125     | Other diseases of musculoskeletal system and connective tissue .. .. .      | 487         | ..     |
| A126     | Spina bifida .. .. .  | ..          | 1      |
| A127     | Congenital anomalies of heart .. .. .                                       | 59          | 33     |
| A128     | Other congenital anomalies of circulatory system .. .. .                    | 37          | 3      |
| A129     | Cleft palate and cleft lip .. .. .  | 36          | ..     |
| A130     | All other congenital anomalies .. .. .                                      | 121         | 22     |
| A131     | Birth injury and difficult labour .. .. .                                   | 52          | 36     |
| A132     | Conditions of placenta and cord .. .. .                                     | ..          | 6      |
| A133     | Haemolytic disease of newborn .. .. .                                       | ..          | 1      |
| A134     | Anoxic and hypoxic conditions not elsewhere classified .. .. .              | 32          | 40     |
| A135     | Other causes of perinatal morbidity and mortality .. .. .                   | 236         | 123    |
| A136     | Senility without mention of psychosis .. .. .                               | ..          | ..     |
| A137     | Symptoms and other ill-defined conditions .. .. .                           | 3,664       | 24     |
| AN138    | Fracture of skull .. .. .   | 224         | 17     |
| AN139    | Fracture of spine and trunk .. .. .   | 169         | 4      |
| AN140    | Fracture of limbs .. .. .   | 2,209       | 4      |
| AN141    | Dislocation without fracture .. .. .  | 182         | ..     |
| AN142    | Sprains and strains of joints and adjacent muscle .. .. .                   | 340         | ..     |
| AN143    | Intracranial injury (excluding skull fracture) .. .. .                      | 491         | 15     |
| AN144    | Internal injury of chest, abdomen and pelvis .. .. .                        | 13          | 4      |
| AN145    | Laceration and open wound .. .. .   | 4,013       | 4      |
| AN146    | Superficial injury, contusion and crushing with intact skin surface .. .. . | 982         | ..     |
| AN147    | Foreign body entering through orifice .. .. .                               | 137         | 2      |
| AN148    | Burns .. .. .   | 900         | 17     |
| AN149    | Adverse effects of chemical substances .. .. .                              | 449         | 4      |
| AN150    | All other and unspecified effects of external causes .. .. .                | 556         | 8      |
|          | Total .. .. .   | 95,399      | 2,108  |



APPENDIX XIX—continued

II. NUMBER OF IN-PATIENTS TREATED AND DEATHS RECORDED BY DISEASE GROUPS IN  
GOVERNMENT HOSPITALS DURING YEAR ENDED 31 MARCH 1972—continued  
New Guinea

| Code No. | Disease, injury, etc.  | In-patients | Deaths |
|----------|--|-------------|--------|
| A1       | Cholera .. .. .  | ..          | ..     |
| A2       | Typhoid fever .. .. .  | ..          | ..     |
| A3       | Paratyphoid fever and other salmonella infections .. .. .            | 5           | ..     |
| A4       | Bacillary dysentery and amoebiasis .. .. .                           | 134         | 14     |
| A5       | Enteritis, and other diarrhoeal diseases .. .. .                     | 10,087      | 275    |
| A6       | Tuberculosis of respiratory system .. .. .                           | 1,297       | 57     |
| A7       | Tuberculosis of meninges and central nervous system .. .. .          | 22          | 7      |
| A8       | Tuberculosis of intestines, peritoneum and mesenteric glands .. .. . | 1           | 3      |
| A9       | Tuberculosis of bones and joints .. .. .                             | 53          | 3      |
| A10      | Other tuberculosis, including late effects .. .. .                   | 159         | 4      |
| A11      | Plague .. .. .   | ..          | ..     |
| A12      | Anthrax .. .. .  | ..          | ..     |
| A13      | Brucellosis .. .. .  | ..          | ..     |
| A14      | Leprosy .. .. .  | 896         | 8      |
| A15      | Diphtheria .. .. .   | ..          | 1      |
| A16      | Whooping cough .. .. .   | 360         | 52     |
| A17      | Streptococcal sore throat and scarlet fever .. .. .                  | ..          | 1      |
| A18      | Erysipelas .. .. .   | 11          | ..     |
| A19      | Meningococcal infection .. .. .                                      | 2           | 10     |
| A20      | Tetanus .. .. .  | 45          | 7      |
| A21      | Other bacterial diseases .. .. .                                     | 271         | 63     |
| A22      | Acute poliomyelitis .. .. .  | 61          | ..     |
| A23      | Late effects of acute poliomyelitis .. .. .                          | 21          | ..     |
| A24      | Smallpox .. .. .   | ..          | ..     |
| A25      | Measles .. .. .  | 1,036       | 5      |
| A26      | Yellow fever .. .. .   | ..          | ..     |
| A27      | Viral encephalitis .. .. .   | 9           | 1      |
| A28      | Infectious hepatitis .. .. .   | 185         | 8      |
| A29      | Other viral diseases .. .. .   | 886         | 18     |
| A30      | Typhus and other rickettsiosis .. .. .                               | 7           | ..     |
| A31      | Malaria .. .. .  | 8,490       | 101    |
| A32      | Trypanosomiasis .. .. .  | ..          | ..     |
| A33      | Relapsing fever .. .. .  | ..          | ..     |
| A34      | Congenital syphilis .. .. .  | 6           | ..     |
| A35      | Early syphilis, symptomatic .. .. .                                  | ..          | ..     |
| A36      | Syphilis of central nervous system .. .. .                           | ..          | ..     |
| A37      | Other syphilis .. .. .   | 1,042       | ..     |
| A38      | Gonococcal infections .. .. .  | 754         | ..     |
| A39      | Schistosomiasis .. .. .  | ..          | ..     |
| A40      | Hydatidosis .. .. .  | 8           | ..     |
| A41      | Filarial infection .. .. .   | 56          | ..     |
| A42      | Ancylostomiasis .. .. .  | 407         | 1      |
| A43      | Other helminthiasis .. .. .  | 482         | 4      |
| A44      | All other infective and parasitic diseases .. .. .                   | 1,335       | 3      |
| A45      | Malignant neoplasm of buccal cavity and pharynx .. .. .              | 74          | 7      |
| A46      | Malignant neoplasm of oesophagus .. .. .                             | 6           | 3      |
| A47      | Malignant neoplasm of stomach .. .. .                                | 40          | 8      |
| A48      | Malignant neoplasm of intestines, except rectum .. .. .              | 15          | 4      |
| A49      | Malignant neoplasm of rectum and rectosigmoid junction .. .. .       | ..          | 2      |
| A50      | Malignant neoplasm of larynx .. .. .                                 | 20          | 2      |
| A51      | Malignant neoplasm of trachea, bronchus and lung .. .. .             | 24          | 15     |
| A52      | Malignant neoplasm of bone .. .. .                                   | 4           | 1      |
| A53      | Malignant neoplasm of skin .. .. .                                   | 15          | 4      |
| A54      | Malignant neoplasm of breast .. .. .                                 | 17          | 4      |
| A55      | Malignant neoplasm of cervix uteri .. .. .                           | 15          | 5      |
| A56      | Other malignant neoplasm of uterus .. .. .                           | 8           | 3      |
| A57      | Malignant neoplasm of prostate .. .. .                               | ..          | ..     |
| A58      | Malignant neoplasm of other and unspecified sites .. .. .            | 254         | 49     |
| A59      | Leukemia .. .. .   | 10          | 10     |
| A60      | Other neoplasms of lymphatic and haematopoietic tissue .. .. .       | 21          | 12     |
| A61      | Benign neoplasms and neoplasms of unspecified nature .. .. .         | 406         | 14     |
| A62      | Non-toxic goitre .. .. .   | 79          | 1      |
| A63      | Thyrotoxicosis with or without goitre .. .. .                        | 2           | 2      |

APPENDIX XIX—*continued*

11. NUMBER OF IN-PATIENTS TREATED AND DEATHS RECORDED BY DISEASE GROUPS IN GOVERNMENT HOSPITALS DURING YEAR ENDED 31 MARCH 1972—*continued*

*New Guinea*

| Code No. | Disease, injury, etc.  | In-patients | Deaths |
|----------|--|-------------|--------|
| A64      | Diabetes mellitus .. .. .  | 26          | 3      |
| A65      | Avitaminoses and other nutritional deficiency .. .. .                            | 1,369       | 55     |
| A66      | Other endocrine and metabolic diseases .. .. .                                   | 68          | 7      |
| A67      | Anaemias .. .. .   | 1,748       | 26     |
| A68      | Other diseases of blood and blood-forming organs .. .. .                         | 333         | ..     |
| A69      | Psychoses .. .. .  | 344         | 1      |
| A70      | Neuroses, personality disorders and other non-psychotic mental disorders .. .. . | 282         | 2      |
| A71      | Mental retardation .. .. .   | 29          | ..     |
| A72      | Meningitis .. .. .   | 597         | 109    |
| A73      | Multiple sclerosis .. .. .   | ..          | 1      |
| A74      | Epilepsy .. .. .   | 252         | 3      |
| A75      | Inflammatory diseases of eye .. .. .   | 955         | ..     |
| A76      | Cataract .. .. .   | 194         | ..     |
| A77      | Glaucoma .. .. .   | 12          | ..     |
| A78      | Otitis media and mastoiditis .. .. .   | 869         | 9      |
| A79      | Other diseases of nervous system and sense organs .. .. .                        | 553         | 29     |
| A80      | Active rheumatic fever .. .. .   | 57          | 2      |
| A81      | Chronic rheumatic heart disease .. .. .  | 57          | 16     |
| A82      | Hypertensive disease .. .. .   | 94          | 11     |
| A83      | Ischaemic heart disease .. .. .  | 102         | 5      |
| A84      | Other forms of heart disease .. .. .   | 347         | 46     |
| A85      | Cerebrovascular disease .. .. .  | 44          | 14     |
| A86      | Diseases of arteries, arterioles and capillaries .. .. .                         | 20          | 6      |
| A87      | Venous thrombosis and embolism .. .. .   | 29          | 1      |
| A88      | Other diseases of circulatory system .. .. .                                     | 101         | 3      |
| A89      | Acute respiratory infections .. .. .   | 3,241       | 85     |
| A90      | Influenza .. .. .  | 1,489       | 8      |
| A91      | Viral pneumonia .. .. .  | ..          | 2      |
| A92      | Other pneumonia .. .. .  | 11,914      | 297    |
| A93      | Bronchitis, emphysema and asthma .. .. .   | 5,514       | 64     |
| A94      | Hypertrophy of tonsils and adenoids .. .. .                                      | 44          | ..     |
| A95      | Empyema and abscess of lung .. .. .  | 18          | 1      |
| A96      | Other diseases of respiratory system .. .. .                                     | 455         | 31     |
| A97      | Diseases of teeth and supporting structures .. .. .                              | 454         | 2      |
| A98      | Peptic ulcer .. .. .   | 319         | 6      |
| A99      | Gastritis and duodenitis .. .. .   | 574         | 1      |
| A100     | Appendicitis .. .. .   | 290         | 3      |
| A101     | Intestinal obstruction and hernia .. .. .  | 450         | 19     |
| A102     | Cirrhosis of liver .. .. .   | 150         | 37     |
| A103     | Cholelithiasis and cholecystitis .. .. .   | 45          | ..     |
| A104     | Other diseases of digestive system .. .. .                                       | 848         | 43     |
| A105     | Acute nephritis .. .. .  | 11          | 4      |
| A106     | Other nephritis and nephrosis .. .. .  | 167         | 46     |
| A107     | Infections of kidney .. .. .   | 105         | 5      |
| A108     | Calculus of urinary system .. .. .   | 22          | ..     |
| A109     | Hyperplasia of prostate .. .. .  | 18          | 3      |
| A110     | Diseases of breast .. .. .   | 423         | 2      |
| A111     | Other diseases of genito-urinary system .. .. .                                  | 2,962       | 14     |
| A112     | Toxaemias of pregnancy and the puerperium .. .. .                                | 145         | 3      |
| A113     | Haemorrhage of pregnancy and childbirth .. .. .                                  | 640         | 12     |
| A114     | Abortion induced for legal indications .. .. .                                   | ..          | ..     |
| A115     | Other and unspecified abortion .. .. .   | 576         | 5      |
| A116     | Sepsis of childbirth and the puerperium .. .. .                                  | 144         | 15     |
| A117     | Other complications of pregnancy, childbirth and the puerperium .. .. .          | 1,195       | 20     |
| A118     | Delivery without mention of complication .. .. .                                 | 8,073       | ..     |
| A119     | Infections of skin and subcutaneous tissue .. .. .                               | 4,037       | 13     |
| A120     | Other diseases of skin and subcutaneous tissue .. .. .                           | 2,974       | 2      |
| A121     | Arthritis and spondylitis .. .. .  | 1,174       | 3      |
| A122     | Non-articular rheumatism and rheumatism unspecified .. .. .                      | 250         | ..     |
| A123     | Osteomyelitis and periostitis .. .. .  | 323         | 1      |
| A124     | Ankylosis and acquired musculoskeletal deformities .. .. .                       | 68          | ..     |

APPENDIX XIX—continued

11. NUMBER OF IN-PATIENTS TREATED AND DEATHS RECORDED BY DISEASE GROUPS IN GOVERNMENT HOSPITALS DURING YEAR ENDED 31 MARCH 1972—continued

New Guinea

| Code No. | Disease, injury, etc.   | In-patients    | Deaths       |
|----------|---|----------------|--------------|
| A125     | Other diseases of musculoskeletal system and connective tissue .. .. .      | 532            | 1            |
| A126     | Spina bifida .. .. .  | ..             | ..           |
| A127     | Congenital anomalies of heart .. .. .                                       | 50             | 33           |
| A128     | Other congenital anomalies of circulatory system .. .. .                    | ..             | 1            |
| A129     | Cleft palate and cleft lip .. .. .  | 45             | ..           |
| A130     | All other congenital anomalies .. .. .                                      | 150            | 28           |
| A131     | Birth injury and difficult labour .. .. .                                   | ..             | 38           |
| A132     | Conditions of placenta and cord .. .. .                                     | ..             | 12           |
| A133     | Haemolytic disease of newborn .. .. .                                       | ..             | 1            |
| A134     | Anoxic and hypoxic conditions not elsewhere classified .. .. .              | ..             | 47           |
| A135     | Other causes of perinatal morbidity and mortality .. .. .                   | ..             | 113          |
| A136     | Senility without mention of psychosis .. .. .                               | 5              | ..           |
| A137     | Symptoms and other ill-defined conditions .. .. .                           | 4,413          | 10           |
| AN138    | Fracture of skull .. .. .   | 271            | 8            |
| AN139    | Fracture of spine and trunk .. .. .   | 224            | 4            |
| AN140    | Fracture of limbs .. .. .   | 2,219          | 5            |
| AN141    | Dislocation without fracture .. .. .  | 259            | ..           |
| AN142    | Sprains and strains of joints and adjacent muscle .. .. .                   | 388            | ..           |
| AN143    | Head injury (including fracture) .. .. .                                    | 561            | 12           |
| AN144    | Internal injury of chest, abdomen and pelvis .. .. .                        | 72             | 10           |
| AN145    | Laceration and open wounds .. .. .  | 4,772          | 7            |
| AN146    | Superficial injury, contusion and crushing with intact skin surface .. .. . | 923            | ..           |
| AN147    | Effects of foreign body entering through orifice .. .. .                    | 100            | 7            |
| AN148    | Burns .. .. .   | 860            | 21           |
| AN149    | Effects of poison .. .. .   | 463            | 6            |
| AN150    | All other and unspecified effects of external causes .. .. .                | 546            | 9            |
|          | <b>Total .. .. .</b>  | <b>103,585</b> | <b>2,261</b> |

## 12. PRINCIPAL CAUSES OF DEATH OF CHILDREN UNDER TEN YEARS OLD, OCCURRING IN GOVERNMENT HOSPITALS, BY AGE AND SEX, DURING YEAR ENDED 31 MARCH 1972

Papua

(AS ASCERTAINED FROM DETAILS SHOWN ON DEATH CERTIFICATES)

| Causes of death                          | International classification code numbers | Under ten years |      |        | Under one month |      |        | One month but under one year |      |        | One year but under five years |      |        | Five years but under ten years |      |        |
|--|---|-----------------|------|--------|-----------------|------|--------|------------------------------|------|--------|-------------------------------|------|--------|--------------------------------|------|--------|
|  |   | Persons         | Male | Female | Persons         | Male | Female | Persons                      | Male | Female | Persons                       | Male | Female | Persons                        | Male | Female |
| Diarrhoeal diseases ..                   | 009                                       | 58              | 28   | 30     | 7               | 1    | 6      | 15                           | 8    | 7      | 26                            | 14   | 12     | 10                             | 5    | 5      |
| Pneumonia .. ..                          | 480-486                                   | 96              | 53   | 43     | 10              | 5    | 5      | 55                           | 31   | 24     | 26                            | 17   | 9      | 5                              | ..   | 5      |
| Immaturity .. ..                         | 777                                       | 36              | 25   | 11     | 36              | 25   | 11     | ..                           | ..   | ..     | ..                            | ..   | ..     | ..                             | ..   | ..     |
| Meningitis .. ..                         | 036, 320                                  | 27              | 19   | 8      | 2               | 1    | 1      | 13                           | 11   | 2      | 10                            | 5    | 5      | 2                              | 2    | ..     |
| Malaria .. ..                            | 034                                       | 25              | 20   | 5      | 1               | 1    | ..     | 6                            | 5    | 1      | 14                            | 11   | 3      | 4                              | 3    | 1      |
| Malnutrition ..                          | 260-269                                   | 22              | 11   | 11     | ..              | ..   | ..     | 7                            | 2    | 5      | 12                            | 8    | 4      | 3                              | 1    | 2      |
| Congenital malformations                 | 740-759                                   | 31              | 16   | 15     | 17              | 10   | 7      | 11                           | 4    | 7      | 3                             | 2    | 1      | ..                             | ..   | ..     |
| Tuberculosis ..                          | 010-019                                   | 18              | 8    | 10     | ..              | ..   | ..     | 5                            | 3    | 2      | 7                             | 1    | 6      | 6                              | 4    | 2      |
| Accidents, poisonings and violence .. .. | 800-999                                   | 11              | 2    | 9      | 3               | 1    | 2      | 1                            | ..   | 1      | 4                             | 1    | 3      | 3                              | ..   | 3      |
| Septicaemia .. ..                        | 038                                       | 12              | 7    | 5      | 7               | 3    | 4      | 3                            | 2    | 1      | 1                             | 1    | ..     | 1                              | 1    | ..     |
| Dysentery (other) ..                     | 004, 006, 007                             | 5               | 2    | 3      | ..              | ..   | ..     | ..                           | ..   | ..     | 2                             | 2    | ..     | 3                              | ..   | 3      |
| Tetanus .. ..                            | 037                                       | 10              | 3    | 7      | 8               | 3    | 5      | 1                            | ..   | 1      | ..                            | ..   | ..     | 1                              | ..   | 1      |
| Measles .. ..                            | 055                                       | 3               | 1    | 2      | ..              | ..   | ..     | ..                           | ..   | ..     | 3                             | 1    | 2      | ..                             | ..   | ..     |
| Encephalitis .. ..                       | 323                                       | 5               | 2    | 3      | ..              | ..   | ..     | ..                           | ..   | ..     | 3                             | ..   | 3      | 2                              | 2    | ..     |
| Nephritis .. ..                          | 580-584                                   | 3               | 3    | ..     | ..              | ..   | ..     | ..                           | ..   | ..     | 1                             | 1    | ..     | 2                              | 2    | ..     |
| Birth injuries ..                        | 772                                       | 8               | 5    | 3      | 8               | 5    | 3      | ..                           | ..   | ..     | ..                            | ..   | ..     | ..                             | ..   | ..     |
| Other causes .. ..                       | ..  | 120             | 69   | 51     | 68              | 33   | 35     | 19                           | 13   | 6      | 21                            | 14   | 7      | 12                             | 9    | 3      |
| All causes .. ..                         | 004-999                                   | 490             | 274  | 216    | 167             | 88   | 79     | 136                          | 79   | 57     | 133                           | 78   | 55     | 54                             | 29   | 25     |

12. PRINCIPAL CAUSES OF DEATH OF CHILDREN UNDER TEN YEARS OF AGE, OCCURRING IN GOVERNMENT HOSPITALS, BY AGE AND SEX, DURING YEAR ENDED 31 MARCH 1971  
New Guinea

(AS ASCERTAINED FROM CAUSES OF DEATHS SHOWN ON DEATH CERTIFICATES)

| Causes of death                                       | International classification code numbers | Under ten years |      |        | Under one month |      |        | One month but under one year |      |        | One year but under five years |      |        | Five years but under ten years |      |        |
|---|---|-----------------|------|--------|-----------------|------|--------|------------------------------|------|--------|-------------------------------|------|--------|--------------------------------|------|--------|
|   |   | Persons         | Male | Female | Persons         | Male | Female | Persons                      | Male | Female | Persons                       | Male | Female | Persons                        | Male | Female |
| Pneumonia .. .. .                                     | 480-486                                   | 206             | 113  | 93     | 29              | 16   | 13     | 139                          | 77   | 62     | 34                            | 20   | 14     | 4                              | ..   | 4      |
| Enteritis and other diarrhoeal diseases .. .. .       | 008, 009                                  | 132             | 79   | 53     | 4               | 1    | 3      | 39                           | 22   | 17     | 62                            | 36   | 26     | 27                             | 20   | 7      |
| Immaturity .. .. .                                    | 777                                       | 75              | 42   | 33     | 75              | 42   | 33     | ..                           | ..   | ..     | ..                            | ..   | ..     | ..                             | ..   | ..     |
| Bronchitis and bronchiolitis .. .. .                  | 466, 490                                  | 55              | 24   | 31     | 5               | 2    | 3      | 44                           | 20   | 24     | 6                             | 2    | 4      | ..                             | ..   | ..     |
| Malaria .. .. .                                       | 084                                       | 61              | 32   | 29     | 1               | ..   | 1      | 10                           | 3    | 7      | 44                            | 25   | 19     | 6                              | 4    | 2      |
| Meningitis .. .. .                                    | 320                                       | 81              | 43   | 38     | 6               | 3    | 3      | 40                           | 19   | 21     | 31                            | 20   | 11     | 4                              | 1    | 3      |
| Avitaminosis and other nutritional deficiency .. .. . | 260, 269                                  | 72              | 37   | 35     | 1               | ..   | 1      | 37                           | 22   | 15     | 27                            | 14   | 13     | 7                              | 1    | 6      |
| Congenital anomalies .. .. .                          | 740, 759                                  | 53              | 29   | 24     | 26              | 17   | 9      | 15                           | 6    | 9      | 9                             | 5    | 4      | 3                              | 1    | 2      |
| Accidents, violence and poisonings .. .. .            | 800-999                                   | 25              | 10   | 15     | 3               | 3    | ..     | 5                            | 2    | 3      | 10                            | 3    | 7      | 7                              | 2    | 5      |
| Tuberculosis .. .. .                                  | 010, 019                                  | 14              | 8    | 6      | ..              | ..   | ..     | 2                            | 1    | 1      | 10                            | 6    | 4      | 2                              | 1    | 1      |
| Other causes .. .. .                                  | ..  | 377             | 227  | 150    | 176             | 110  | 66     | 82                           | 48   | 34     | 72                            | 41   | 31     | 47                             | 28   | 19     |
| All causes .. .. .                                    | ..  | 1,151           | 644  | 507    | 326             | 194  | 132    | 413                          | 220  | 193    | 305                           | 172  | 133    | 107                            | 58   | 49     |

## 12. PRINCIPAL CAUSES OF DEATH OF CHILDREN UNDER TEN YEARS OF AGE, OCCURRING IN GOVERNMENT HOSPITALS, BY AGE AND SEX, DURING YEAR ENDED 31 MARCH 1972

New Guinea

(AS ASCERTAINED FROM CAUSES OF DEATHS SHOWN ON DEATH CERTIFICATES)

| Causes of death                                       | International classification code numbers | Under ten years |      |        | Under one month |      |        | One month but under one year |      |        | One year but under five years |      |        | Five years but under ten years |      |        |
|---|---|-----------------|------|--------|-----------------|------|--------|------------------------------|------|--------|-------------------------------|------|--------|--------------------------------|------|--------|
|   |   | Persons         | Male | Female | Persons         | Male | Female | Persons                      | Male | Female | Persons                       | Male | Female | Persons                        | Male | Female |
| Pneumonia .. .. .                                     | 480-486                                   | 187             | 107  | 80     | 30              | 21   | 9      | 107                          | 63   | 44     | 47                            | 22   | 25     | 3                              | 1    | 2      |
| Enteritis and other diarrhoeal diseases .. .. .       | 008, 009                                  | 194             | 119  | 75     | 7               | 5    | 2      | 59                           | 36   | 23     | 93                            | 59   | 34     | 35                             | 19   | 16     |
| Immaturity .. .. .                                    | 777                                       | 66              | 38   | 28     | 66              | 38   | 28     | ..                           | ..   | ..     | ..                            | ..   | ..     | ..                             | ..   | ..     |
| Bronchitis and bronchiolitis .. .. .                  | 466, 490                                  | 86              | 45   | 41     | 11              | 4    | 7      | 60                           | 31   | 29     | 15                            | 10   | 5      | ..                             | ..   | ..     |
| Malaria .. .. .                                       | 084                                       | 64              | 37   | 27     | ..              | ..   | ..     | 16                           | 8    | 8      | 33                            | 24   | 9      | 15                             | 5    | 10     |
| Meningitis .. .. .                                    | 320                                       | 75              | 36   | 39     | 6               | 2    | 4      | 40                           | 18   | 22     | 16                            | 9    | 7      | 13                             | 7    | 6      |
| Avitaminosis and other nutritional deficiency .. .. . | 260-269                                   | 45              | 24   | 21     | ..              | ..   | ..     | 20                           | 13   | 7      | 21                            | 10   | 11     | 4                              | 1    | 3      |
| Congenital anomalies .. .. .                          | 740-759                                   | 60              | 36   | 24     | 29              | 14   | 15     | 22                           | 17   | 5      | 7                             | 5    | 2      | 2                              | ..   | 2      |
| Accidents, violence and poisonings .. .. .            | 800-999                                   | 30              | 13   | 17     | 5               | 4    | 1      | 8                            | 2    | 6      | 13                            | 5    | 8      | 4                              | 2    | 2      |
| Tuberculosis .. .. .                                  | 010-019                                   | 11              | 4    | 7      | ..              | ..   | ..     | ..                           | ..   | ..     | 8                             | 3    | 5      | 3                              | 1    | 2      |
| Other causes .. .. .                                  | ..  | 402             | 230  | 172    | 191             | 120  | 71     | 101                          | 51   | 50     | 76                            | 38   | 38     | 34                             | 21   | 13     |
| All causes .. .. .                                    | ..  | 1,220           | 689  | 531    | 345             | 208  | 137    | 433                          | 239  | 194    | 329                           | 185  | 144    | 113                            | 57   | 56     |

Notes: (1) Figures in Tables 12 and 13 now include both Papua New Guinean and expatriate children.

(2) Figures for Papua for year ended 31 March 1971 were published last year.

13. DEATHS OF CHILDREN BY DISTRICT, AGE AND SEX, OCCURRING IN GOVERNMENT HOSPITALS DURING YEAR ENDED 31 MARCH 1970  
(AS ASCERTAINED FROM DETAILS ON DEATH CERTIFICATES)

## Papua

| District              | Under ten years |      |        | Under one month |      |        | One to eleven months |      |        | One to four years |      |        | Five to nine years |      |        |
|-----------------------|-----------------|------|--------|-----------------|------|--------|----------------------|------|--------|-------------------|------|--------|--------------------|------|--------|
|                       | Persons         | Male | Female | Persons         | Male | Female | Persons              | Male | Female | Persons           | Male | Female | Persons            | Male | Female |
| Western District ..   | 12              | 8    | 4      | 3               | 2    | 1      | 3                    | 2    | 1      | 5                 | 3    | 2      | 1                  | 1    | ..     |
| Gulf District ..      | 15              | 11   | 4      | 3               | 2    | 1      | 5                    | 3    | 2      | 4                 | 4    | ..     | 3                  | 2    | 1      |
| Central District ..   | 110             | 65   | 45     | 48              | 28   | 20     | 31                   | 15   | 16     | 18                | 12   | 6      | 13                 | 10   | 3      |
| Northern District ..  | 31              | 19   | 12     | 26              | 9    | 7      | 6                    | 3    | 3      | 9                 | 7    | 2      | ..                 | ..   | ..     |
| Milne Bay ..          | 23              | 16   | 7      | 6               | 4    | 2      | 4                    | 3    | 1      | 11                | 8    | 3      | 2                  | 1    | 1      |
| Southern Highlands .. | 148             | 87   | 61     | 25              | 14   | 11     | 47                   | 27   | 20     | 56                | 32   | 24     | 20                 | 14   | 6      |
| All Districts ..      | 339             | 206  | 133    | 111             | 59   | 42     | 96                   | 53   | 43     | 103               | 66   | 37     | 39                 | 28   | 11     |

13. DEATHS OF CHILDREN BY DISTRICT, AGE AND SEX, OCCURRING IN GOVERNMENT HOSPITALS DURING YEAR ENDED 31 MARCH 1971  
(AS ASCERTAINED FROM DETAILS ON DEATH CERTIFICATES)

## Papua

| District              | Under ten years |      |        | Under one month |      |        | One to eleven months |      |        | One to four years |      |        | Five to nine years |      |        |
|-----------------------|-----------------|------|--------|-----------------|------|--------|----------------------|------|--------|-------------------|------|--------|--------------------|------|--------|
|                       | Persons         | Male | Female | Persons         | Male | Female | Persons              | Male | Female | Persons           | Male | Female | Persons            | Male | Female |
| Western District ..   | 33              | 17   | 16     | 13              | 5    | 8      | 11                   | 7    | 4      | 5                 | 2    | 3      | 4                  | 3    | 1      |
| Gulf District ..      | 42              | 24   | 18     | 11              | 5    | 6      | 11                   | 5    | 6      | 12                | 8    | 4      | 8                  | 6    | 2      |
| Central District ..   | 158             | 82   | 76     | 76              | 40   | 36     | 31                   | 17   | 14     | 42                | 22   | 20     | 9                  | 3    | 6      |
| Northern District ..  | 42              | 25   | 17     | 15              | 8    | 7      | 12                   | 7    | 5      | 14                | 9    | 5      | 1                  | 1    | ..     |
| Milne Bay ..          | 32              | 21   | 11     | 15              | 12   | 3      | 8                    | 4    | 4      | 5                 | 2    | 3      | 4                  | 3    | 1      |
| Southern Highlands .. | 183             | 105  | 78     | 37              | 18   | 19     | 63                   | 39   | 24     | 55                | 35   | 20     | 28                 | 13   | 15     |
| All Districts ..      | 490             | 274  | 216    | 167             | 88   | 79     | 136                  | 79   | 57     | 133               | 78   | 55     | 54                 | 29   | 25     |

Note: Figures for Papua for year ended 31 March 1972 are not yet available.

## 12. PRINCIPAL CAUSES OF DEATH OF CHILDREN UNDER TEN YEARS OF AGE, OCCURRING IN GOVERNMENT HOSPITALS, BY AGE AND SEX, DURING YEAR ENDED 31 MARCH 1972

## New Guinea

(AS ASCERTAINED FROM CAUSES OF DEATHS SHOWN ON DEATH CERTIFICATES)

| Causes of death                                       | International classification code numbers | Under ten years |      |        | Under one month |      |        | One month but under one year |      |        | One year but under five years |      |        | Five years but under ten years |      |        |
|---|---|-----------------|------|--------|-----------------|------|--------|------------------------------|------|--------|-------------------------------|------|--------|--------------------------------|------|--------|
|   |   | Persons         | Male | Female | Persons         | Male | Female | Persons                      | Male | Female | Persons                       | Male | Female | Persons                        | Male | Female |
| Pneumonia .. .. .                                     | 480-486                                   | 187             | 107  | 80     | 30              | 21   | 9      | 107                          | 63   | 44     | 47                            | 22   | 25     | 3                              | 1    | 2      |
| Enteritis and other diarrhoeal diseases .. .. .       | 008, 009                                  | 194             | 119  | 75     | 7               | 5    | 2      | 59                           | 36   | 23     | 93                            | 59   | 34     | 35                             | 19   | 16     |
| Immaturity .. .. .                                    | 777                                       | 66              | 38   | 28     | 66              | 38   | 28     | ..                           | ..   | ..     | ..                            | ..   | ..     | ..                             | ..   | ..     |
| Bronchitis and bronchiolitis .. .. .                  | 466, 490                                  | 86              | 45   | 41     | 11              | 4    | 7      | 60                           | 31   | 29     | 15                            | 10   | 5      | ..                             | ..   | ..     |
| Malaria .. .. .                                       | 084                                       | 64              | 37   | 27     | ..              | ..   | ..     | 16                           | 8    | 8      | 33                            | 24   | 9      | 15                             | 5    | 10     |
| Meningitis .. .. .                                    | 320                                       | 75              | 36   | 39     | 6               | 2    | 4      | 40                           | 18   | 22     | 16                            | 9    | 7      | 13                             | 7    | 6      |
| Avitaminosis and other nutritional deficiency .. .. . | 260-269                                   | 45              | 24   | 21     | ..              | ..   | ..     | 20                           | 13   | 7      | 21                            | 10   | 11     | 4                              | 1    | 3      |
| Congenital anomalies .. .. .                          | 740-759                                   | 60              | 36   | 24     | 29              | 14   | 15     | 22                           | 17   | 5      | 7                             | 5    | 2      | 2                              | ..   | 2      |
| Accidents, violence and poisonings .. .. .            | 800-999                                   | 30              | 13   | 17     | 5               | 4    | 1      | 8                            | 2    | 6      | 13                            | 5    | 8      | 4                              | 2    | 2      |
| Tuberculosis .. .. .                                  | 010-019                                   | 11              | 4    | 7      | ..              | ..   | ..     | ..                           | ..   | ..     | 8                             | 3    | 5      | 3                              | 1    | 2      |
| Other causes .. .. .                                  | ..  | 402             | 230  | 172    | 191             | 120  | 71     | 101                          | 51   | 50     | 76                            | 38   | 38     | 34                             | 21   | 13     |
| All causes .. .. .                                    | ..  | 1,220           | 689  | 531    | 345             | 208  | 137    | 433                          | 239  | 194    | 329                           | 185  | 144    | 113                            | 57   | 56     |

Notes: (1) Figures in Tables 12 and 13 now include both Papua New Guinean and expatriate children.

(2) Figures for Papua for year ended 31 March 1971 were published last year.



13. DEATHS OF CHILDREN BY DISTRICT, AGE AND SEX, OCCURRING IN GOVERNMENT HOSPITALS DURING YEAR ENDED 31 MARCH 1970  
(AS ASCERTAINED FROM DETAILS ON DEATH CERTIFICATES)

## Papua

| District              | Under ten years |      |        | Under one month |      |        | One to eleven months |      |        | One to four years |      |        | Five to nine years |      |        |
|-----------------------|-----------------|------|--------|-----------------|------|--------|----------------------|------|--------|-------------------|------|--------|--------------------|------|--------|
|                       | Persons         | Male | Female | Persons         | Male | Female | Persons              | Male | Female | Persons           | Male | Female | Persons            | Male | Female |
| Western District ..   | 12              | 8    | 4      | 3               | 2    | 1      | 3                    | 2    | 1      | 5                 | 3    | 2      | 1                  | 1    | ..     |
| Gulf District ..      | 15              | 11   | 4      | 3               | 2    | 1      | 5                    | 3    | 2      | 4                 | 4    | ..     | 3                  | 2    | 1      |
| Central District ..   | 110             | 65   | 45     | 48              | 28   | 20     | 31                   | 15   | 16     | 18                | 12   | 6      | 13                 | 10   | 3      |
| Northern District ..  | 31              | 19   | 12     | 26              | 9    | 7      | 6                    | 3    | 3      | 9                 | 7    | 2      | ..                 | ..   | ..     |
| Milne Bay ..          | 23              | 16   | 7      | 6               | 4    | 2      | 4                    | 3    | 1      | 11                | 8    | 3      | 2                  | 1    | 1      |
| Southern Highlands .. | 148             | 87   | 61     | 25              | 14   | 11     | 47                   | 27   | 20     | 56                | 32   | 24     | 20                 | 14   | 6      |
| All Districts ..      | 339             | 206  | 133    | 111             | 59   | 42     | 96                   | 53   | 43     | 103               | 66   | 37     | 39                 | 28   | 11     |

13. DEATHS OF CHILDREN BY DISTRICT, AGE AND SEX, OCCURRING IN GOVERNMENT HOSPITALS DURING YEAR ENDED 31 MARCH 1971  
(AS ASCERTAINED FROM DETAILS ON DEATH CERTIFICATES)

## Papua

| District              | Under ten years |      |        | Under one month |      |        | One to eleven months |      |        | One to four years |      |        | Five to nine years |      |        |
|-----------------------|-----------------|------|--------|-----------------|------|--------|----------------------|------|--------|-------------------|------|--------|--------------------|------|--------|
|                       | Persons         | Male | Female | Persons         | Male | Female | Persons              | Male | Female | Persons           | Male | Female | Persons            | Male | Female |
| Western District ..   | 33              | 17   | 16     | 13              | 5    | 8      | 11                   | 7    | 4      | 5                 | 2    | 3      | 4                  | 3    | 1      |
| Gulf District ..      | 42              | 24   | 18     | 11              | 5    | 6      | 11                   | 5    | 6      | 12                | 8    | 4      | 8                  | 6    | 2      |
| Central District ..   | 158             | 82   | 76     | 76              | 40   | 36     | 31                   | 17   | 14     | 42                | 22   | 20     | 9                  | 3    | 6      |
| Northern District ..  | 42              | 25   | 17     | 15              | 8    | 7      | 12                   | 7    | 5      | 14                | 9    | 5      | 1                  | 1    | ..     |
| Milne Bay ..          | 32              | 21   | 11     | 15              | 12   | 3      | 8                    | 4    | 4      | 5                 | 2    | 3      | 4                  | 3    | 1      |
| Southern Highlands .. | 183             | 105  | 78     | 37              | 18   | 19     | 63                   | 39   | 24     | 55                | 35   | 20     | 28                 | 13   | 15     |
| All Districts ..      | 490             | 274  | 216    | 167             | 88   | 79     | 136                  | 79   | 57     | 133               | 78   | 55     | 54                 | 29   | 25     |

Note: Figures for Papua for year ended 31 March 1972 are not yet available.

13. DEATHS OF CHILDREN BY DISTRICT, AGE AND SEX, OCCURRING IN GOVERNMENT HOSPITALS DURING YEAR ENDED 31 MARCH 1970  
(AS ASCERTAINED FROM DETAILS SHOWN ON DEATH CERTIFICATES)

*New Guinea*

| District             | Under ten years |      |        | Under one month |      |        | One month but under one year |      |        | One year but under five years |      |        | Five years but under ten years |      |        |
|----------------------|-----------------|------|--------|-----------------|------|--------|------------------------------|------|--------|-------------------------------|------|--------|--------------------------------|------|--------|
|                      | Persons         | Male | Female | Persons         | Male | Female | Persons                      | Male | Female | Persons                       | Male | Female | Persons                        | Male | Female |
| East Sepik .. ..     | 143             | 87   | 56     | 51              | 34   | 17     | 34                           | 18   | 16     | 41                            | 27   | 14     | 17                             | 8    | 9      |
| West Sepik .. ..     | 47              | 22   | 25     | 11              | 6    | 5      | 16                           | 7    | 9      | 15                            | 7    | 8      | 5                              | 2    | 3      |
| Western Highlands .. | 218             | 120  | 98     | 54              | 32   | 22     | 106                          | 59   | 47     | 38                            | 15   | 23     | 20                             | 14   | 6      |
| Eastern Highlands .. | 201             | 103  | 98     | 47              | 26   | 21     | 88                           | 40   | 48     | 50                            | 27   | 23     | 16                             | 10   | 6      |
| Chimbu .. ..         | 129             | 70   | 59     | 13              | 9    | 4      | 63                           | 36   | 27     | 40                            | 18   | 22     | 13                             | 7    | 6      |
| Madang .. ..         | 73              | 41   | 32     | 17              | 10   | 7      | 25                           | 13   | 12     | 22                            | 15   | 7      | 9                              | 3    | 6      |
| Morobe .. ..         | 188             | 119  | 69     | 67              | 42   | 25     | 52                           | 33   | 19     | 57                            | 37   | 20     | 12                             | 7    | 5      |
| West New Britain ..  | 9               | 4    | 5      | 2               | 2    | ..     | 1                            | ..   | 1      | 4                             | 2    | 2      | 2                              | ..   | 2      |
| East New Britain ..  | 87              | 46   | 41     | 42              | 22   | 20     | 11                           | 7    | 4      | 24                            | 12   | 12     | 10                             | 5    | 5      |
| Bougainville .. ..   | 30              | 17   | 13     | 10              | 3    | 7      | 8                            | 5    | 3      | 9                             | 7    | 2      | 3                              | 2    | 1      |
| New Ireland .. ..    | 16              | 9    | 7      | 9               | 6    | 3      | 4                            | ..   | 4      | 3                             | 3    | ..     | ..                             | ..   | ..     |
| Manus .. ..          | 10              | 6    | 4      | 3               | 2    | 1      | 5                            | 2    | 3      | 2                             | 2    | ..     | ..                             | ..   | ..     |
| All districts .. ..  | 1,151           | 644  | 507    | 326             | 194  | 132    | 413                          | 220  | 193    | 305                           | 172  | 133    | 107                            | 58   | 49     |

## 13. DEATHS OF CHILDREN BY DISTRICT, AGE AND SEX, OCCURRING IN GOVERNMENT HOSPITALS DURING YEAR ENDED 31 MARCH 1971

New Guinea

(AS ASCERTAINED FROM DETAILS SHOWN ON DEATH CERTIFICATES)

| District                | Under ten years |      |        | Under one month |      |        | One month but under one year |      |        | One year but under five years |      |        | Five years but under ten years |      |        |
|-------------------------|-----------------|------|--------|-----------------|------|--------|------------------------------|------|--------|-------------------------------|------|--------|--------------------------------|------|--------|
|                         | Persons         | Male | Female | Persons         | Male | Female | Persons                      | Male | Female | Persons                       | Male | Female | Persons                        | Male | Female |
| East Sepik .. ..        | 123             | 69   | 54     | 43              | 29   | 14     | 41                           | 25   | 16     | 30                            | 13   | 17     | 9                              | 2    | 7      |
| West Sepik .. ..        | 64              | 41   | 23     | 19              | 14   | 5      | 18                           | 13   | 5      | 17                            | 10   | 7      | 10                             | 4    | 6      |
| Western Highlands .. .. | 341             | 176  | 165    | 59              | 28   | 31     | 152                          | 75   | 77     | 103                           | 61   | 42     | 27                             | 12   | 15     |
| Eastern Highlands .. .. | 172             | 97   | 75     | 57              | 34   | 23     | 60                           | 37   | 23     | 50                            | 23   | 27     | 5                              | 3    | 2      |
| Chimbu .. ..            | 118             | 68   | 50     | 11              | 6    | 5      | 54                           | 28   | 26     | 37                            | 26   | 11     | 16                             | 8    | 8      |
| Madang .. ..            | 87              | 43   | 44     | 23              | 14   | 9      | 33                           | 13   | 20     | 20                            | 9    | 11     | 11                             | 7    | 4      |
| Morobe .. ..            | 166             | 110  | 56     | 69              | 48   | 21     | 43                           | 28   | 15     | 35                            | 22   | 13     | 19                             | 12   | 7      |
| West New Britain .. ..  | 11              | 5    | 6      | ..              | ..   | ..     | 3                            | 1    | 2      | 6                             | 2    | 4      | 2                              | 2    | ..     |
| East New Britain .. ..  | 78              | 45   | 33     | 42              | 23   | 19     | 10                           | 6    | 4      | 18                            | 11   | 7      | 8                              | 5    | 3      |
| Bougainville .. ..      | 32              | 18   | 14     | 10              | 5    | 5      | 12                           | 7    | 5      | 8                             | 5    | 3      | 2                              | 1    | 1      |
| New Ureland .. ..       | 22              | 15   | 7      | 8               | 6    | 2      | 6                            | 5    | 1      | 4                             | 3    | 1      | 4                              | 1    | 3      |
| Manus .. ..             | 6               | 2    | 4      | 4               | 1    | 3      | 1                            | 1    | ..     | 1                             | ..   | 1      | ..                             | ..   | ..     |
| All districts .. ..     | 1,220           | 689  | 531    | 345             | 208  | 137    | 433                          | 239  | 194    | 329                           | 185  | 144    | 113                            | 57   | 56     |

Notes: (1) Figures for Papua and New Guinea for year ended 31 March 1972 are not yet available.

(2) Figures in Tables 12 and 13 now include both Papua New Guinean and expatriate children.

APPENDIX XIX—*continued*

14. CHILD ENROLMENTS AND ATTENDANCES AT GOVERNMENT CHILD HEALTH CENTRES OF  
EXPATRIATE PERSONS DURING YEAR ENDED 31 MARCH 1972

*Papua*

| Centre               | Enrolments              |                                 | Attendances             |                                 |
|----------------------|-------------------------|---------------------------------|-------------------------|---------------------------------|
|                      | Children under one year | Children aged one to five years | Children under one year | Children aged one to five years |
| Alotau .. .. .       | 4                       | ..                              | 16                      | 9                               |
| Popondetta .. .. .   | 1                       | 2                               | 2                       | ..                              |
| Port Moresby .. .. . | 502                     | 536                             | 6,805                   | 1,028                           |
|                      | 507                     | 538                             | 6,823                   | 1,037                           |

*New Guinea*

| Centre              | Enrolments              |                                 | Attendances             |                                 |
|---------------------|-------------------------|---------------------------------|-------------------------|---------------------------------|
|                     | Children under one year | Children aged one to five years | Children under one year | Children aged one to five years |
| Bogia .. .. .       | 2                       | 1                               | 6                       | 18                              |
| Bulolo .. .. .      | 35                      | 63                              | 145                     | 26                              |
| Goroka .. .. .      | 59                      | 96                              | 446                     | 68                              |
| Kavieng .. .. .     | 12                      | 34                              | 66                      | 13                              |
| Kieta .. .. .       | 14                      | 5                               | 56                      | 24                              |
| Kundiawa .. .. .    | 13                      | 15                              | 42                      | 4                               |
| Lae .. .. .         | 88                      | 113                             | 430                     | 135                             |
| Lorengau .. .. .    | 11                      | 2                               | 182                     | 4                               |
| Madang .. .. .      | 77                      | 107                             | 821                     | 189                             |
| Mount Hagen .. .. . | 71                      | 52                              | 993                     | 230                             |
| Nahavio .. .. .     | 6                       | 2                               | 7                       | 3                               |
| Namatanai .. .. .   | 1                       | 1                               | 4                       | 4                               |
| Panguna .. .. .     | 79                      | 115                             | 991                     | 452                             |
| Rabaul .. .. .      | 180                     | 220                             | 1,872                   | 430                             |
| Sohano .. .. .      | 2                       | 9                               | 10                      | 7                               |
| Wewak .. .. .       | 39                      | 49                              | 208                     | 56                              |
|                     | 689                     | 884                             | 6,279                   | 1,663                           |

APPENDIX XIX—continued

15. CHILD ENROLMENTS AND ATTENDANCES AT GOVERNMENT MATERNAL AND CHILD HEALTH CENTRES AND CLINICS OF PAPUA NEW GUINEANS DURING YEAR ENDED 31 MARCH 1972

Papua

| Centre               | Enrolments              |                            | Attendances             |                            |                          |                   |
|----------------------|-------------------------|----------------------------|-------------------------|----------------------------|--------------------------|-------------------|
|                      | Children under one year | Children one to five years | Children under one year | Children one to five years | Children over five years | Total attendances |
| Alotau .. .. .       | 53                      | 132                        | 1,112                   | 3,009                      | 337                      | 4,458             |
| Bereina .. .. .      | 95                      | 465                        | 705                     | 2,702                      | 361                      | 3,768             |
| Daru .. .. .         | 150                     | 353                        | 2,963                   | 3,741                      | 39                       | 6,743             |
| Divinai .. .. .      | 38                      | 165                        | 519                     | 2,132                      | 246                      | 2,897             |
| Ialibu .. .. .       | 153                     | 1,107                      | 1,745                   | 6,486                      | 100                      | 8,331             |
| Kagua .. .. .        | 350                     | 1,566                      | 2,515                   | 9,145                      | 892                      | 12,552            |
| Kaintiba .. .. .     | 29                      | 61                         | 108                     | 249                        | 96                       | 453               |
| Kerema .. .. .       | 143                     | 348                        | 984                     | 1,835                      | 155                      | 2,973             |
| Kwikila .. .. .      | 150                     | 350                        | 252                     | 532                        | 56                       | 840               |
| Mapamoiwa .. .. .    | ..                      | ..                         | 21                      | 94                         | 4                        | 119               |
| Mendi .. .. .        | 496                     | 2,030                      | 5,075                   | 11,415                     | 3,130                    | 19,620            |
| Misima .. .. .       | 31                      | 31                         | 466                     | 1,432                      | 255                      | 2,153             |
| Popondetta .. .. .   | 79                      | 167                        | 917                     | 1,963                      | 96                       | 2,976             |
| Port Moresby .. .. . | 1,834                   | 5,467                      | 44,403                  | 77,792                     | 15,462                   | 137,657           |
| Saibo .. .. .        | 455                     | 1,634                      | 3,948                   | 11,934                     | 1,134                    | 17,016            |
| Samarai .. .. .      | 95                      | 96                         | 918                     | 1,674                      | 77                       | 2,669             |
| Siagaru .. .. .      | 74                      | 117                        | 409                     | 1,548                      | 409                      | 2,366             |
| Sogeri .. .. .       | ..                      | ..                         | 317                     | 858                        | 87                       | 1,262             |
| Tapini .. .. .       | 141                     | 317                        | 108                     | 240                        | 68                       | 416               |
| Tufi .. .. .         | 120                     | 539                        | 490                     | 1,655                      | 270                      | 2,415             |
| Total .. .. .        | 4,486                   | 14,945                     | 67,975                  | 140,435                    | 23,274                   | 231,684           |

## APPENDIX XIX—continued

## 15. CHILD ENROLMENTS AND ATTENDANCES AT GOVERNMENT MATERNAL AND CHILD HEALTH CENTRES AND CLINICS OF PAPUA NEW GUINEANS DURING YEAR ENDED 31 MARCH 1972—continued

## New Guinea

| Centres           | Enrolments              |                                 |                          | Attendances             |                                 |                          | Total attendances |
|-------------------|-------------------------|---------------------------------|--------------------------|-------------------------|---------------------------------|--------------------------|-------------------|
|                   | Children under one year | Children aged one to five years | Children over five years | Children under one year | Children aged one to five years | Children over five years |                   |
| Angoram .. ..     | 86                      | 269                             | 6                        | 652                     | 920                             | 55                       | 1,627             |
| Asaro .. ..       | 259                     | 675                             | 49                       | 551                     | 720                             | 20                       | 1,291             |
| Baluan .. ..      | 47                      | 192                             | 1                        | 432                     | 1,589                           | 94                       | 2,115             |
| Bogia .. ..       | 213                     | 977                             | 10                       | 1,908                   | 6,871                           | 179                      | 8,958             |
| Buin .. ..        | 37                      | 74                              | 8                        | 208                     | 661                             | 124                      | 993               |
| Bulolo .. ..      | 425                     | 1,411                           | ..                       | 2,444                   | 6,509                           | 112                      | 9,065             |
| Butubum .. ..     | 337                     | 504                             | 5                        | 2,550                   | 2,248                           | 60                       | 4,858             |
| Goroka .. ..      | 515                     | 612                             | 4                        | 4,468                   | 2,857                           | 24                       | 7,349             |
| Hegenofi .. ..    | ..                      | ..                              | ..                       | 729                     | 2,776                           | 507                      | 4,012             |
| Kabwum .. ..      | 477                     | 1,933                           | 306                      | 2,593                   | 9,315                           | 1,190                    | 13,098            |
| Kaiapit .. ..     | 601                     | 1,590                           | 15                       | 2,960                   | 7,789                           | 194                      | 10,943            |
| Kainantu .. ..    | 422                     | 1,057                           | 316                      | 2,997                   | 8,217                           | 1,437                    | 12,651            |
| Kavieng .. ..     | 199                     | 626                             | 67                       | 1,898                   | 3,705                           | 225                      | 5,828             |
| Kerowagi .. ..    | 168                     | 783                             | 145                      | 1,506                   | 1,838                           | 641                      | 3,985             |
| Kieta .. ..       | 127                     | 460                             | 10                       | 1,004                   | 2,465                           | 227                      | 3,696             |
| Konga .. ..       | 200                     | 700                             | 7                        | 1,596                   | 4,861                           | 209                      | 6,666             |
| Kundiawa .. ..    | 894                     | 1,669                           | 129                      | 5,210                   | 7,477                           | 229                      | 12,916            |
| Lae .. ..         | 1,400                   | 3,680                           | 62                       | 17,254                  | 27,009                          | 1,731                    | 45,994            |
| Lorengau .. ..    | 401                     | 1,289                           | 217                      | 3,601                   | 8,379                           | 949                      | 12,929            |
| Lufa .. ..        | 524                     | 1,243                           | 99                       | 475                     | 1,056                           | 98                       | 1,629             |
| Madang .. ..      | 1,004                   | 3,343                           | 20                       | 6,708                   | 16,712                          | 600                      | 24,020            |
| Maprik .. ..      | 432                     | 1,354                           | ..                       | 2,525                   | 7,530                           | 168                      | 10,223            |
| Marawaka .. ..    | ..                      | ..                              | ..                       | 271                     | 761                             | -38                      | 1,070             |
| Minj .. ..        | 303                     | 868                             | 15                       | 2,263                   | 3,660                           | 69                       | 5,992             |
| Mount Hagen .. .. | 1,116                   | 3,096                           | 69                       | 10,393                  | 22,787                          | 872                      | 34,052            |
| Nahavio .. ..     | 354                     | 1,428                           | 355                      | 2,735                   | 7,683                           | 1,262                    | 11,680            |
| Namatanai .. ..   | 296                     | 1,102                           | 67                       | 2,758                   | 7,498                           | 213                      | 10,469            |
| Okapa .. ..       | ..                      | ..                              | ..                       | 250                     | 381                             | 53                       | 684               |
| Panguna .. ..     | 168                     | 476                             | 101                      | 1,629                   | 1,639                           | 1,087                    | 4,355             |
| Pomio .. ..       | 203                     | 623                             | 87                       | 1,404                   | 5,021                           | 164                      | 6,589             |
| Rabaul .. ..      | 1,093                   | 3,931                           | 226                      | 18,780                  | 39,700                          | 15,326                   | 73,806            |
| Sighere .. ..     | 169                     | 378                             | 98                       | 1,022                   | 1,605                           | 91                       | 2,718             |
| Sohano .. ..      | 667                     | 1,034                           | 154                      | 2,031                   | 4,781                           | 354                      | 7,166             |
| Sina Sina .. ..   | ..                      | ..                              | ..                       | 427                     | 944                             | 40                       | 1,411             |
| Tapipipi .. ..    | 321                     | 1,365                           | 232                      | 1,989                   | 5,871                           | 892                      | 8,752             |
| Yunapaka .. ..    | 364                     | 1,381                           | 44                       | 3,353                   | 9,008                           | 996                      | 13,357            |
| Wakunai .. ..     | 20                      | 238                             | 39                       | 216                     | 608                             | 94                       | 918               |
| Wandi .. ..       | 268                     | 1,648                           | 6                        | 1,647                   | 4,021                           | 139                      | 5,807             |
| Wantoat .. ..     | 224                     | 910                             | 21                       | 1,692                   | 5,448                           | 160                      | 7,300             |
| Wewak .. ..       | 819                     | 2,392                           | 508                      | 7,881                   | 12,853                          | 895                      | 21,629            |
| Total .. ..       | 15,153                  | 45,311                          | 3,498                    | 125,010                 | 265,773                         | 31,818                   | 422,601           |

APPENDIX XIX—continued

16. GOVERNMENT MATERNAL AND CHILD HEALTH CENTRES AND CLINICS FOR ANTENATAL CARE, CONFINEMENTS AND VILLAGE DEATHS OF PAPUA NEW GUINEANS FOR YEAR ENDED 31 MARCH 1972

Papua

| Centres            | Antenatal  |                   | Village confinements |              |                 | Number of village deaths |                 |                      |                   |                 |
|--------------------|------------|-------------------|----------------------|--------------|-----------------|--------------------------|-----------------|----------------------|-------------------|-----------------|
|                    | Enrolments | Total attendances | Confinements         | Still births | Multiple births | Maternal                 | Under one month | One to twelve months | One to five years | Over five years |
| Atotau .. ..       | 13         | 367               | 37                   | 1            | ..              | ..                       | 2               | ..                   | 1                 | ..              |
| Bereina .. ..      | 28         | 177               | 41                   | 3            | ..              | ..                       | 3               | 2                    | 5                 | ..              |
| Daru .. ..         | 80         | 2,621             | ..                   | ..           | ..              | ..                       | ..              | 1                    | ..                | ..              |
| Divisai .. ..      | 17         | 200               | 25                   | 1            | ..              | ..                       | 2               | ..                   | ..                | ..              |
| Ialibu .. ..       | 55         | 312               | 205                  | 1            | ..              | ..                       | ..              | 1                    | ..                | ..              |
| Kagua .. ..        | 153        | 784               | 525                  | 4            | ..              | ..                       | 4               | 14                   | 6                 | ..              |
| Kaintiba .. ..     | ..         | 21                | 18                   | 1            | 1 x 2           | 1                        | 2               | ..                   | ..                | ..              |
| Kerema .. ..       | 42         | 356               | 54                   | 2            | ..              | 4                        | 1               | ..                   | 1                 | ..              |
| Kwikila .. ..      | 39         | 142               | 49                   | ..           | ..              | ..                       | 2               | 2                    | ..                | 1               |
| Mapamoiwa .. ..    | ..         | 5                 | 10                   | ..           | ..              | ..                       | ..              | ..                   | ..                | ..              |
| Mendi .. ..        | 127        | 1,270             | 558                  | 25           | 1 x 2           | 3                        | 5               | 28                   | 22                | 5               |
| Misima .. ..       | 13         | 189               | 42                   | 2            | 1 x 2           | ..                       | ..              | ..                   | ..                | ..              |
| Popondetta .. ..   | 57         | 608               | 61                   | ..           | 2 x 2           | ..                       | 1               | ..                   | 1                 | ..              |
| Port Moresby .. .. | 306        | 3,041             | 563                  | 1            | 1 x 2           | ..                       | 1               | ..                   | 2                 | ..              |
| Saibu .. ..        | 129        | 1,075             | 516                  | 6            | 2 x 2           | ..                       | ..              | 3                    | ..                | ..              |
| Samarai .. ..      | 32         | 341               | 17                   | 4            | 1 x 2           | 1                        | ..              | 1                    | ..                | ..              |
| Siegaru .. ..      | 13         | 156               | 26                   | 1            | ..              | ..                       | ..              | ..                   | 1                 | ..              |
| Sogeri .. ..       | ..         | 37                | 22                   | ..           | ..              | ..                       | ..              | ..                   | ..                | ..              |
| Tapini .. ..       | ..         | 165               | 31                   | ..           | ..              | ..                       | ..              | ..                   | ..                | ..              |
| Tufi .. ..         | 40         | 171               | 118                  | 1            | 2 x 2           | ..                       | ..              | 1                    | 2                 | ..              |
| Total .. ..        | 1,144      | 12,038            | 2,918                | 53           | 11 x 2          | 9                        | 23              | 53                   | 44                | 6               |

APPENDIX XIX—continued

16. GOVERNMENT MATERNAL AND CHILD HEALTH CENTRES AND CLINICS FOR ANTENATAL CARE, CONFINEMENTS AND VILLAGE DEATHS OF PAPUA NEW GUINEANS FOR YEAR ENDED 31 MARCH 1972—continued

New Guinea

| Centres       | Antenatal  |                   | Village confinements |              |                 | Number of village deaths |                 |                      |                   |                 |
|---------------|------------|-------------------|----------------------|--------------|-----------------|--------------------------|-----------------|----------------------|-------------------|-----------------|
|               | Enrolments | Total attendances | Confinements         | Still births | Multiple births | Maternal                 | Under one month | One to twelve months | One to five years | Over five years |
| Angoram .. .. | 8          | 82                | 59                   | ..           | 1 x 2           | ..                       | ..              | 2                    | 2                 | ..              |
| Asaro .. ..   | 49         | 218               | 296                  | 1            | 2 x 2           | ..                       | 2               | 2                    | ..                | ..              |
| Baluan .. ..  | 19         | 188               | 4                    | ..           | ..              | ..                       | ..              | 1                    | ..                | ..              |
| Bogia .. ..   | 64         | 498               | 195                  | 6            | 1 x 2           | ..                       | ..              | 2                    | 7                 | ..              |
| Buin .. ..    | 20         | 117               | 7                    | ..           | ..              | ..                       | ..              | ..                   | ..                | ..              |
| Bulolo .. ..  | 80         | 442               | 403                  | 6            | 2 x 2           | 4                        | 2               | 13                   | 10                | 1               |
| Butibum .. .. | 22         | 62                | 67                   | ..           | ..              | ..                       | ..              | 1                    | 1                 | ..              |
| Goroka .. ..  | 13         | 51                | 267                  | ..           | ..              | ..                       | ..              | 1                    | 1                 | ..              |
| Henganofi ..  | ..         | 91                | 22                   | 1            | ..              | ..                       | ..              | 3                    | ..                | ..              |
| Kabwum .. ..  | 159        | 758               | 354                  | ..           | ..              | 2                        | ..              | 9                    | 5                 | ..              |
| Kaipit .. ..  | 101        | 994               | 451                  | 14           | 3 x 2           | 1                        | 2               | 15                   | 9                 | ..              |
| Kainantu ..   | 137        | 1,053             | 449                  | 4            | 3 x 2           | 5                        | 13              | 22                   | 22                | ..              |
| Kavieng .. .. | 59         | 593               | 56                   | ..           | 2 x 2           | ..                       | ..              | ..                   | ..                | ..              |
| Kerowagi ..   | 52         | 388               | 73                   | 1            | ..              | ..                       | 4               | 6                    | 4                 | ..              |
| Kieta .. ..   | 189        | 300               | 69                   | 3            | ..              | ..                       | ..              | ..                   | ..                | ..              |
| Konga .. ..   | 20         | 437               | ..                   | ..           | ..              | ..                       | ..              | 1                    | ..                | ..              |
| Kundiawa ..   | 72         | 862               | 883                  | 1            | ..              | ..                       | 2               | 7                    | 3                 | ..              |
| Lae .. ..     | 378        | 9,360             | 1,226                | 17           | 10 x 2          | 3                        | 17              | 37                   | 18                | ..              |
| Lorengau ..   | 108        | 1,082             | 225                  | 3            | ..              | 2                        | ..              | 4                    | 2                 | ..              |
| Lufa .. ..    | 6          | 138               | 42                   | ..           | 2 x 2           | 1                        | 1               | ..                   | ..                | ..              |
| Madang .. ..  | 228        | 3,631             | 615                  | 9            | 2 x 2           | 2                        | 4               | 16                   | 18                | ..              |
| Maprik .. ..  | 161        | 959               | 307                  | 9            | 1 x 2           | 2                        | 6               | 9                    | 10                | ..              |
| Marawaka ..   | ..         | 19                | 21                   | ..           | ..              | ..                       | ..              | 1                    | ..                | ..              |
| Minj .. ..    | 142        | 616               | 310                  | 1            | 6 x 2           | ..                       | 1               | 4                    | 4                 | ..              |
| Mount Hagen   | 217        | 2,060             | 1,233                | 9            | 8 x 2           | 2                        | 25              | 41                   | 30                | ..              |
| Nahavio ..    | 107        | 1,002             | 160                  | 1            | ..              | ..                       | 3               | 2                    | 3                 | ..              |
| Namatanai ..  | 98         | 917               | 163                  | 4            | ..              | ..                       | 1               | 5                    | 1                 | ..              |
| Okapa .. ..   | ..         | 36                | 12                   | 1            | ..              | ..                       | ..              | ..                   | ..                | ..              |
| Panguna ..    | 58         | 515               | 41                   | ..           | ..              | ..                       | 1               | 1                    | ..                | ..              |
| Pomio .. ..   | 45         | 462               | 77                   | 1            | 1 x 2           | ..                       | ..              | 2                    | 1                 | ..              |
| Rabaul .. ..  | 394        | 4,485             | 130                  | 1            | ..              | ..                       | 1               | 9                    | 10                | ..              |
| Sighere .. .. | 107        | 289               | 94                   | ..           | 2 x 2           | 2                        | 1               | 3                    | 3                 | 1               |
| Sohano .. ..  | 76         | 658               | 217                  | ..           | ..              | ..                       | ..              | 2                    | 5                 | ..              |
| Sina Sina ..  | ..         | 75                | 48                   | ..           | 2 x 2           | ..                       | ..              | ..                   | ..                | ..              |
| Tapipipi ..   | 76         | 429               | 29                   | 1            | ..              | ..                       | 1               | ..                   | ..                | ..              |
| Vunapaka ..   | 75         | 998               | 59                   | ..           | ..              | ..                       | 1               | ..                   | ..                | ..              |
| Wakunai ..    | 2          | 48                | 3                    | ..           | ..              | ..                       | ..              | ..                   | ..                | ..              |
| Wandi .. ..   | 64         | 215               | 283                  | ..           | 1 x 2           | ..                       | 1               | 3                    | 2                 | ..              |
| Wantoat ..    | 55         | 367               | 233                  | 12           | ..              | ..                       | 4               | 3                    | 2                 | ..              |
| Wewak .. ..   | 188        | 1,959             | 374                  | 8            | 4 x 2           | ..                       | 3               | 13                   | 9                 | 1               |
| Total .. ..   | 3,649      | 37,454            | 9,557                | 114          | 53 x 2          | 26                       | 96              | 240                  | 182               | 4               |



APPENDIX XIX—continued

17. CHILD ENROLMENTS AND ATTENDANCES AT MISSION MATERNAL AND CHILD HEALTH CENTRES AND CLINICS FOR PAPUA NEW GUINEANS DURING YEAR ENDED 31 MARCH 1972

Papua

| Mission                                 | Number of stations | Enrolments                                   |  | Attendances                                  |                            |                          | Total attendances |
|---|--------------------|--|--|--|----------------------------|--------------------------|-------------------|
|   |                    | Children less than one year at 31 March 1972 | Children aged one to five years at 31 March 1972 | Children less than one year at 31 March 1972 | Children one to five years | Children over five years |                   |
| Apostolic Christian Mission .. .. .     | 1                  | 160  | 661  | 1,656  | 4,826                      | 1,638                    | 8,120             |
| Asia Pacific Christian Mission .. .. .  | 17                 | 1,651  | 3,563  | 18,943                                       | 16,613                     | 659                      | 36,215            |
| Australian Baptist Mission .. .. .      | 1                  | ..   | ..   | 320  | 860                        | 275                      | 1,455             |
| Bamu River Mission .. .. .              | 1                  | 36   | 46   | 1,773  | 1,779                      | 559                      | 4,111             |
| Capuchin Mission .. .. .                | 3                  | 218  | 748  | 1,412  | 4,479                      | 388                      | 6,279             |
| Catholic Mission of the Sacred Heart—   |                    |  |  |  |                            |                          |                   |
| East Papua .. .. .                      | 6                  | 356  | 1,662  | 3,566  | 10,429                     | 4,234                    | 18,229            |
| Port Moresby .. .. .                    | 3                  | 724  | 2,027  | 9,242  | 4,116                      | 1,443                    | 14,801            |
| Yule Island .. .. .                     | 6                  | 1,517  | 2,594  | 8,505  | 22,036                     | 10,548                   | 41,089            |
| Christian Mission in Many Lands .. .. . | 2                  | 376  | 1,594  | 4,141  | 13,029                     | 3,546                    | 20,716            |
| Christian Union Mission .. .. .         | 1                  | 374  | 1,058  | 2,651  | 8,213                      | 1,369                    | 12,233            |
| De Montfort Catholic Mission .. .. .    | 5                  | 208  | 724  | 2,604  | 6,169                      | 1,892                    | 10,665            |
| New Guinea Anglican Mission .. .. .     | 12                 | 1,199  | 4,090  | 13,652                                       | 42,782                     | 11,071                   | 67,505            |
| Seventh Day Adventist Mission .. .. .   | 1                  | ..   | ..   | 622  | 2,229                      | 780                      | 3,631             |
| United Church Mission .. .. .           | 27                 | 4,288  | 15,580   | 42,164                                       | 110,164                    | 21,635                   | 173,963           |
| Wesleyan Church Mission .. .. .         | 2                  | 370  | 1,055  | 2,602  | 6,033                      | 3,121                    | 11,756            |
| Total .. .. .                           | 88                 | 11,477                                       | 35,402   | 113,853                                      | 253,757                    | 63,158                   | 430,768           |

APPENDIX XIX—*continued*

17. CHILD ENROLMENTS AND ATTENDANCES AT MISSION MATERNAL AND CHILD HEALTH CENTRES AND CLINICS FOR PAPUA NEW GUINEANS DURING YEAR ENDED 31 MARCH 1972—*continued*

*New Guinea*

| Mission   | Number of stations | Enrolments                                   |  | Attendances                                  |                            |                          | Total attendances |
|---|--------------------|--|--|--|----------------------------|--------------------------|-------------------|
|   |                    | Children less than one year at 31 March 1972 | Children aged one to five years at 31 March 1972 | Children less than one year at 31 March 1972 | Children one to five years | Children over five years |                   |
| Apostolic Church Mission of New Zealand                           | 1                  | 146  | 592  | 2,014  | 6,769                      | 2,454                    | 11,237            |
| Assemblies of God in Australia ..                                 | 1                  | 266  | 890  | 1,046  | 2,898                      | 188                      | 4,132             |
| Australian Baptist Mission .. ..                                  | 6                  | 1,171  | 4,063  | 9,641  | 26,734                     | 5,620                    | 41,995            |
| Australian Church of Christ .. ..                                 | 3                  | 237  | 1,060  | 1,636  | 5,327                      | 789                      | 7,752             |
| Australian Four Square Mission ..                                 | 1                  | ..   | ..   | 227  | 199                        | ..                       | 426               |
| Australian Lutheran Mission .. ..                                 | 4                  | 1,333  | 5,207  | 4,071  | 13,654                     | 2,813                    | 20,538            |
| British Solomon Islands Union of Seventh Day Adventists .. ..     | 3                  | 72   | 40   | 750  | 943                        | 68                       | 1,761             |
| Catholic Mission of the Divine Word—Goroka .. ..                  | 4*                 | 394  | 869  | 3,660  | 6,715                      | 772                      | 11,147            |
| Catholic Mission of the Divine Word—Wewak .. ..                   | 13                 | 2,408  | 9,157  | 18,882                                       | 57,849                     | 8,106                    | 84,837            |
| Catholic Mission of the Holy Ghost ..                             | 8                  | 1,321  | 4,670  | 11,011                                       | 36,803                     | 4,174                    | 51,988            |
| Catholic Mission of the Most Sacred Heart of Jesus—Kavieng .. ..  | 9                  | 846  | 3,013  | 6,897  | 24,527                     | 6,236                    | 37,660            |
| Catholic Mission of the Most Sacred Heart of Jesus—Vunapope .. .. | 16                 | 2,342  | 8,331  | 20,981                                       | 68,028                     | 20,553                   | 109,562           |
| Catholic Mission of the Passionist Fathers—Vanimo .. ..           | 3                  | 191  | 762  | 2,172  | 5,707                      | 307                      | 8,186             |
| Christian Mission in Many Lands ..                                | 5                  | 606  | 2,608  | 4,876  | 15,329                     | 1,773                    | 21,978            |
| Coral Sea Union of Seventh Day Adventists .. ..                   | 5                  | 960  | 2,649  | 7,052  | 19,534                     | 96                       | 26,682            |
| Evangelical Bible Mission .. ..                                   | 2                  | 84   | 352  | 754  | 2,226                      | 211                      | 3,191             |
| Franciscan Mission .. ..  | 9                  | 1,248  | 4,008  | 8,467  | 36,167                     | 7,911                    | 52,545            |
| Holy Trinity Catholic Mission .. ..                               | 1                  | 148  | 957  | 867  | 4,005                      | 62                       | 4,934             |
| Lutheran Mission of New Guinea—Missouri Synod .. ..               | 4                  | 807  | 3,818  | 6,653  | 23,912                     | 2,052                    | 32,617            |
| Lutheran Mission of New Guinea .. ..                              | 9                  | 2,819  | 11,613   | 22,988                                       | 81,313                     | 8,039                    | 112,340           |
| Marist Mission Society .. ..                                      | 16                 | 1,595  | 5,431  | 12,475                                       | 38,498                     | 7,502                    | 58,475            |
| Nazarene Mission .. ..  | 2                  | 300  | 903  | 1,331  | 3,854                      | 255                      | 5,440             |
| New Guinea Anglican Mission .. ..                                 | 4                  | 426  | 1,209  | 5,591  | 11,834                     | 2,591                    | 20,016            |
| Salvation Army—New Guinea .. ..                                   | 3                  | 449  | 2,153  | 5,047  | 10,867                     | 1,123                    | 17,037            |
| South Sea Evangelical Mission .. ..                               | 1                  | 155  | 440  | 1,664  | 4,527                      | ..                       | 6,191             |
| Swiss Evangelical Mission .. ..                                   | 2                  | 154  | 357  | 1,875  | 4,807                      | 2,008                    | 8,690             |
| United Church Mission .. ..                                       | 8                  | 1,072  | 4,180  | 9,059  | 25,112                     | 1,254                    | 35,425            |
| Gospel Tidings Mission—Closed 1971 ..                             | ..                 | ..   | ..   | ..   | ..                         | ..                       | ..                |
| <b>Total .. ..</b>  | <b>143</b>         | <b>21,550</b>                                | <b>79,332</b>                                    | <b>171,687</b>                               | <b>538,138</b>             | <b>86,957</b>            | <b>796,782</b>    |

\* One mission closed November 1971 (no A/S); one mission does midwifery only.

APPENDIX XIX—continued

18. MISSION CHILD WELFARE CENTRES FOR PAPUA NEW GUINEANS FOR YEAR ENDED 31 MARCH 1972:  
VILLAGE CONFINEMENTS, BIRTHS AND DEATHS

Papua

| Mission  | Confinements |              |                  |             | Deaths   |                 |                              |                               |                     |
|--|--------------|--------------|------------------|-------------|----------|-----------------|------------------------------|-------------------------------|---------------------|
|  | Confinements | Still births | Premature births | Twin births | Maternal | Under one month | One month and under one year | One year and under five years | Five years and over |
| Apostolic Christian Mission ..                   | 68           | 1            | 1                | ..          | ..       | 3               | 2                            | ..                            | ..                  |
| Asia Pacific Christian Mission ..                | 769          | 11           | 7                | 4 x 2       | 4        | 17              | 28                           | 8                             | 2                   |
| Australian Baptist Mission ..                    | 37           | 4            | 6                | 1 x 2       | ..       | ..              | 5                            | 1                             | ..                  |
| Barou River Mission ..                           | 65           | 2            | ..               | ..          | 1        | 1               | 1                            | ..                            | ..                  |
| Capuchin Mission ..                              | 225          | 1            | 2                | 1 x 2       | 2        | 4               | 9                            | 5                             | ..                  |
| Catholic Mission of Sacred Heart—East Papua ..   | 234          | 6            | 5                | ..          | 4        | 6               | 1                            | 12                            | 8                   |
| Catholic Mission of Sacred Heart—Port Moresby .. | 68           | ..           | 6                | 1 x 2       | ..       | ..              | ..                           | ..                            | ..                  |
| Catholic Mission of Sacred Heart—Yule Island ..  | 373          | 9            | 10               | 6 x 2       | 4        | 13              | 20                           | 23                            | 3                   |
| Christian Mission in Many Lands ..               | 391          | 5            | 20               | 3 x 2       | 4        | 9               | 8                            | 26                            | ..                  |
| Christian Union Mission ..                       | 110          | 3            | 7                | 1 x 2       | 1        | 7               | 9                            | 9                             | ..                  |
| De Montfort Catholic Mission                     | 138          | ..           | 6                | 2 x 2       | ..       | 2               | 9                            | 8                             | 5                   |
| New Guinea Anglican Mission                      | 776          | 26           | 7                | 8 x 2       | 2        | 13              | 32                           | 36                            | 7                   |
| Seventh Day Adventist Mission                    | 68           | ..           | 3                | ..          | ..       | 2               | 2                            | 1                             | ..                  |
| United Church Mission ..                         | 3,008        | 81           | 45               | 33 x 2      | 21       | 77              | 71                           | 89                            | 10                  |
| Wesleyan Church Mission ..                       | 241          | 7            | 2                | ..          | 1        | 6               | 7                            | 9                             | 4                   |
| Total ..   | 6,571        | 156          | 127              | 60 x 2      | 44       | 160             | 204                          | 227                           | 39                  |

APPENDIX XIX—continued

18. MISSION CHILD WELFARE CENTRES FOR PAPUA NEW GUINEANS FOR YEAR ENDED 31 MARCH 1972:  
VILLAGE CONFINEMENTS, BIRTHS AND DEATHS—continued  
New Guinea

| Mission  | Confinements  |              |                  |                          | Deaths    |                 |                              |                               |                     |
|--|---------------|--------------|------------------|--------------------------|-----------|-----------------|------------------------------|-------------------------------|---------------------|
|  | Confinements  | Still births | Premature births | Twin births              | Maternal  | Under one month | One month and under one year | One year and under five years | Five years and over |
| Apostolic Church Mission of New Zealand ..                     | 131           | 7            | 9                | 1 x 2                    | 1         | 7               | 3                            | 5                             | 2                   |
| Assemblies of God in Australia ..                              | 87            | ..           | 5                | ..                       | 1         | 3               | 7                            | 5                             | ..                  |
| Australian Baptist Mission ..                                  | 1,023         | 30           | 33               | 9 x 2                    | 4         | 21              | 57                           | 20                            | 10                  |
| Australian Church of Christ ..                                 | 241           | 4            | 6                | 4 x 2                    | 2         | 6               | 13                           | 11                            | 2                   |
| Australian Four Square Mission ..                              | 48            | ..           | ..               | ..                       | ..        | 1               | 4                            | ..                            | ..                  |
| Australian Lutheran Mission ..                                 | 813           | 15           | 13               | 6 x 2                    | 4         | 15              | 34                           | 12                            | 2                   |
| British Solomon Islands Union of Seventh Day Adventists ..     | 30            | 3            | 1                | 1 x 2                    | ..        | 1               | ..                           | ..                            | ..                  |
| Catholic Mission of the Divine Word Goroka ..                  | 341           | 2            | 3                | 2 x 2                    | 2         | 4               | 9                            | 1                             | 1                   |
| Catholic Mission of the Divine Word—Wewak ..                   | 2,125         | 57           | 80               | 28 x 2<br>1 x 3          | 15        | 85              | 121                          | 53                            | 4                   |
| Catholic Mission of the Holy Ghost ..                          | 1,046         | 37           | 12               | 7 x 2                    | 13        | 32              | 68                           | 32                            | 1                   |
| Catholic Mission of the Most Sacred Heart of Jesus—Kavieng ..  | 308           | 5            | 6                | 1 x 2                    | 1         | 3               | 9                            | 9                             | ..                  |
| Catholic Mission of the Most Sacred Heart of Jesus—Vunapope .. | 730           | 13           | 51               | 9 x 2                    | 4         | 24              | 35                           | 29                            | 8                   |
| Catholic Mission of the Passionist Fathers—Vanimo ..           | 374           | 4            | 3                | 4 x 2                    | 3         | 6               | 6                            | 7                             | 2                   |
| Christian Mission in Many Lands ..                             | 697           | 25           | 22               | 6 x 2                    | ..        | 25              | 54                           | 44                            | 5                   |
| Coral Sea Union of Seventh Day Adventists ..                   | 572           | 15           | 19               | 8 x 2                    | 2         | 16              | 31                           | 11                            | 2                   |
| Evangelical Mission ..   | 63            | ..           | ..               | ..                       | ..        | 1               | 1                            | 2                             | ..                  |
| Franciscan Mission ..  | 1,201         | 37           | 47               | 12 x 2                   | 7         | 40              | 42                           | 40                            | 6                   |
| Catholic Mission of the Holy Trinity ..                        | 154           | ..           | ..               | 1 x 2                    | ..        | 2               | 3                            | 4                             | ..                  |
| Lutheran Mission of New Guinea—Missouri Synod ..               | 1,017         | 1            | 4                | 6 x 2                    | ..        | 9               | 35                           | 28                            | 1                   |
| Lutheran Mission of New Guinea ..                              | 1,773         | 28           | 24               | 9 x 2                    | 7         | 50              | 79                           | 41                            | 6                   |
| Marist Mission Society ..                                      | 459           | 10           | 6                | 1 x 2                    | 4         | 11              | 8                            | 13                            | 5                   |
| Nazarene Mission ..  | 182           | ..           | ..               | ..                       | 1         | ..              | ..                           | 60                            | ..                  |
| New Guinea Anglican Mission ..                                 | 627           | 14           | 1                | 3 x 2                    | 2         | 5               | 19                           | 9                             | ..                  |
| Salvation Army—New Guinea ..                                   | 795           | 3            | ..               | 1 x 2                    | ..        | 2               | 16                           | 3                             | ..                  |
| South Sea Evangelical Mission ..                               | 200           | 2            | ..               | ..                       | 2         | 2               | 12                           | 7                             | ..                  |
| Swiss Evangelical Mission ..                                   | 98            | 1            | ..               | 1 x 2                    | 2         | 4               | 6                            | ..                            | ..                  |
| United Church Mission ..                                       | 354           | 5            | 7                | 4 x 2                    | 2         | 10              | 11                           | 12                            | 10                  |
| <b>Total ..</b>  | <b>15,489</b> | <b>318</b>   | <b>352</b>       | <b>124 x 2<br/>1 x 3</b> | <b>79</b> | <b>385</b>      | <b>683</b>                   | <b>458</b>                    | <b>67</b>           |

# APPENDIX XX

## HOUSING

1. NUMBER AND VALUE (WHEN COMPLETED) OF NEW HOUSES AND FLATS, AND VALUE (WHEN COMPLETED) OF OTHER NEW BUILDINGS

| Period              | New houses and flats                       |        | Other new buildings value | Total buildings value |
|---------------------|--|--------|---------------------------|-----------------------|
|                     | Number of dwellings                        | Value  |                           |                       |
|                     |  | \$'000 | \$'000                    | \$'000                |
|                     | <i>Commenced during period</i>             |        |                           |                       |
| Year ended 30 June— |  |        |                           |                       |
| 1968 .. .. .        | 1,664                                      | 13,380 | 13,648                    | 27,028                |
| 1969 .. .. .        | 1,824                                      | 11,076 | 19,214                    | 30,288                |
| 1970 .. .. .        | 2,128                                      | 12,604 | 21,751                    | 34,354                |
| 1971 .. .. .        | 1,684                                      | 11,925 | 22,423                    | 34,348                |
| 1972 .. .. .        | 1,336                                      | 8,004  | 17,256                    | 25,261                |
| Quarter ended       |  |        |                           |                       |
| 1971—               |  |        |                           |                       |
| June .. .. .        | 319  | 2,809  | 4,199                     | 7,008                 |
| September .. .. .   | 378  | 1,881  | 3,103                     | 4,984                 |
| December .. .. .    | 390  | 2,256  | 3,939                     | 6,196                 |
| 1972—               |  |        |                           |                       |
| March .. .. .       | 264  | 1,745  | 5,423                     | 7,167                 |
| June .. .. .        | 304  | 2,122  | 4,791                     | 6,914                 |
|                     | <i>Completed during period</i>             |        |                           |                       |
| Year ended 30 June— |  |        |                           |                       |
| 1968 .. .. .        | 1,799                                      | 15,250 | 21,633                    | 36,882                |
| 1969 .. .. .        | 1,558                                      | 11,237 | 19,215                    | 30,453                |
| 1970 .. .. .        | 1,857                                      | 11,613 | 18,710                    | 30,324                |
| 1971 .. .. .        | 1,850                                      | 11,610 | 19,271                    | 30,879                |
| 1972 .. .. .        | 1,621                                      | 9,636  | 17,675                    | 27,311                |
| Quarter ended—      |  |        |                           |                       |
| 1971—               |  |        |                           |                       |
| June .. .. .        | 416  | 2,781  | 2,938                     | 5,719                 |
| September .. .. .   | 653  | 3,763  | 4,880                     | 8,643                 |
| December .. .. .    | 299  | 2,057  | 3,935                     | 5,992                 |
| 1972—               |  |        |                           |                       |
| March .. .. .       | 312  | 1,835  | 4,929                     | 6,764                 |
| June .. .. .        | 357  | 1,981  | 3,931                     | 5,912                 |
|                     | <i>Under construction at end of period</i> |        |                           |                       |
| Year ended 30 June— |  |        |                           |                       |
| 1968 .. .. .        | 617  | 5,095  | 11,685                    | 16,780                |
| 1969 .. .. .        | 883  | 4,946  | 12,149                    | 17,095                |
| 1970 .. .. .        | 1,154                                      | 6,073  | 15,744                    | 21,818                |
| 1971 .. .. .        | 988  | 6,396  | 19,154                    | 25,550                |
| 1972 .. .. .        | 703  | 4,832  | 18,984                    | 23,816                |
| Quarter ended—      |  |        |                           |                       |
| 1971—               |  |        |                           |                       |
| June .. .. .        | 988  | 6,396  | 19,154                    | 25,550                |
| September .. .. .   | 713  | 4,540  | 17,783                    | 22,323                |
| December .. .. .    | 804  | 4,743  | 17,711                    | 22,454                |
| 1972—               |  |        |                           |                       |
| March .. .. .       | 756  | 4,667  | 18,145                    | 22,812                |
| June .. .. .        | 703  | 4,832  | 18,984                    | 23,816                |

## APPENDIX XXI

### PENAL ORGANISATION

#### 1. PERSONS RECEIVED INTO CORRECTIVE INSTITUTIONS FROM COURTS DURING YEAR ENDED 30 JUNE 1972

##### *Papua*

| Term of sentence               | Papua New Guineans |        |       | Europeans |        |       | Other expatriates |        |       |
|--------------------------------|--------------------|--------|-------|-----------|--------|-------|-------------------|--------|-------|
|                                | Male               | Female | Total | Male      | Female | Total | Male              | Female | Total |
| Under 1 month .. ..            | 1,028              | 173    | 1,201 | ..        | ..     | ..    | ..                | ..     | ..    |
| 1 month and under 3 months ..  | 2,892              | 275    | 3,167 | 2         | ..     | 2     | ..                | ..     | ..    |
| 3 months and under 6 months .. | 1,057              | 81     | 1,138 | 1         | ..     | 1     | ..                | ..     | ..    |
| 6 months and under 1 year ..   | 321                | 2      | 323   | 2         | 1      | 3     | ..                | ..     | ..    |
| 1 year and under 2 years ..    | 50                 | ..     | 50    | 1         | ..     | 1     | ..                | ..     | ..    |
| 2 years and under 3 years ..   | 13                 | ..     | 13    | ..        | ..     | ..    | ..                | ..     | ..    |
| 3 years and under 5 years ..   | 35                 | ..     | 35    | ..        | ..     | ..    | ..                | ..     | ..    |
| 5 years and under 10 years ..  | 29                 | ..     | 29    | ..        | ..     | ..    | ..                | ..     | ..    |
| 10 years and under 15 years .. | 9                  | ..     | 9     | ..        | ..     | ..    | ..                | ..     | ..    |
| 15 years and over .. ..        | 2                  | ..     | 2     | ..        | ..     | ..    | ..                | ..     | ..    |
| Life imprisonment .. ..        | 1                  | ..     | 1     | ..        | ..     | ..    | ..                | ..     | ..    |
| Death recorded .. ..           | ..                 | ..     | ..    | ..        | ..     | ..    | ..                | ..     | ..    |
| Queen's pleasure .. ..         | ..                 | ..     | ..    | ..        | ..     | ..    | ..                | ..     | ..    |
| Total { First term .. ..       | 5,184              | 514    | 5,698 | 6         | 1      | 7     | ..                | ..     | ..    |
| Recidivist .. ..               | 253                | 17     | 270   | ..        | ..     | ..    | ..                | ..     | ..    |
| Grand Total .. ..              | 5,437              | 531    | 5,968 | 6         | 1      | 7     | ..                | ..     | ..    |

##### *New Guinea*

| Term of sentence               | Papua New Guineans |        |        | Europeans |        |       | Other expatriates |        |       |
|--------------------------------|--------------------|--------|--------|-----------|--------|-------|-------------------|--------|-------|
|                                | Male               | Female | Total  | Male      | Female | Total | Male              | Female | Total |
| Under 1 month .. ..            | 3,354              | 251    | 3,605  | 4         | ..     | 4     | ..                | ..     | ..    |
| 1 month and under 3 months ..  | 10,201             | 527    | 10,728 | 9         | ..     | 9     | ..                | ..     | ..    |
| 3 months and under 6 months .. | 4,317              | 189    | 4,506  | 3         | ..     | 3     | ..                | ..     | ..    |
| 6 months and under 1 year ..   | 1,270              | 14     | 1,284  | ..        | ..     | ..    | ..                | ..     | ..    |
| 1 year and under 2 years ..    | 128                | 3      | 131    | 1         | ..     | 1     | ..                | ..     | ..    |
| 2 years and under 3 years ..   | 43                 | 2      | 45     | 1         | ..     | 1     | ..                | ..     | ..    |
| 3 years and under 5 years ..   | 51                 | ..     | 51     | ..        | ..     | ..    | ..                | ..     | ..    |
| 5 years and under 10 years ..  | 41                 | 1      | 42     | ..        | ..     | ..    | ..                | ..     | ..    |
| 10 years and under 15 years .. | 12                 | ..     | 12     | ..        | ..     | ..    | ..                | ..     | ..    |
| 15 years and over .. ..        | 1                  | ..     | 1      | ..        | ..     | ..    | ..                | ..     | ..    |
| Life imprisonment .. ..        | 1                  | ..     | 1      | ..        | ..     | ..    | ..                | ..     | ..    |
| Death recorded .. ..           | ..                 | ..     | ..     | ..        | ..     | ..    | ..                | ..     | ..    |
| Queen's pleasure .. ..         | ..                 | ..     | ..     | ..        | ..     | ..    | ..                | ..     | ..    |
| Total { First term .. ..       | 18,733             | 961    | 19,694 | 18        | ..     | 18    | ..                | ..     | ..    |
| Recidivist .. ..               | 686                | 26     | 712    | ..        | ..     | ..    | ..                | ..     | ..    |
| Grand Total .. ..              | 19,419             | 987    | 20,406 | 18        | ..     | 18    | ..                | ..     | ..    |

#### 2. AGE DISTRIBUTION OF PERSONS UNDER SENTENCE IN CORRECTIVE INSTITUTIONS AT 30 JUNE 1972

#### 3. TERMS OF SENTENCES BEING SERVED AT 30 JUNE 1972

Figures for the above tables are not yet available.

**APPENDIX XXII**  
**EDUCATION**

**1. SUMMARY OF GOVERNMENT AND NON-GOVERNMENT SCHOOLS, TEACHERS AND PUPILS AT 30 JUNE 1968 TO 1972**

| At<br>30 June | Government |          |        |        |                      | Non-Government |          |        |        |                      | Total   |          |         |        |                      |
|---------------|------------|----------|--------|--------|----------------------|----------------|----------|--------|--------|----------------------|---------|----------|---------|--------|----------------------|
|               | Schools    | Teachers | Pupils |        |                      | Schools        | Teachers | Pupils |        |                      | Schools | Teachers | Pupils  |        |                      |
|               |            |          | Male   | Female | Persons              |                |          | Male   | Female | Persons              |         |          | Male    | Female | Persons              |
| 1968 ..       | 528        | 2,910    | 58,264 | 30,310 | 88,574               | 1,298          | 4,766    | 85,550 | 54,597 | 140,147              | 1,826   | 7,676    | 143,814 | 84,908 | 228,722              |
| 1969 ..       | 569        | 3,220    | 61,946 | 31,941 | 93,887               | 1,236          | 4,865    | 87,517 | 54,104 | 141,621              | 1,805   | 8,085    | 149,463 | 86,045 | 235,508              |
| 1970 ..       | 585        | 3,368    | 64,403 | 33,144 | 97,547               | 1,179          | 4,372    | 89,213 | 53,591 | 142,804              | 1,764   | 7,740    | 153,616 | 86,735 | 240,351              |
| 1971 ..       | 612        | 3,616    | 68,004 | 35,213 | <sup>a</sup> 104,073 | 1,153          | 4,480    | 92,426 | 54,596 | <sup>a</sup> 148,194 | 1,765   | 8,096    | 160,430 | 89,809 | <sup>a</sup> 252,267 |
| 1972 ..       | 648        | 4,034    | 73,426 | 37,108 | 110,534              | 1,172          | 5,028    | 94,791 | 54,660 | 149,451              | 1,820   | 9,062    | 168,217 | 91,768 | 259,985              |

(<sup>a</sup>) Teachers' College enrolments included only in totals.

## 2. GOVERNMENT AND NON-GOVERNMENT PRIMARY SCHOOLS: TEACHERS AND PUPILS AT 30 JUNE 1968 TO 1972

| At<br>30 June | Government              |                 |         |        |        |         | Non-Government          |                 |         |        |        |         | Total                   |                 |         |        |        |         |
|---------------|-------------------------|-----------------|---------|--------|--------|---------|-------------------------|-----------------|---------|--------|--------|---------|-------------------------|-----------------|---------|--------|--------|---------|
|               | Teachers                |                 |         | Pupils |        |         | Teachers                |                 |         | Pupils |        |         | Teachers                |                 |         | Pupils |        |         |
|               | Papua<br>New<br>Guinean | Ex-<br>patriate | Persons | Male   | Female | Persons | Papua<br>New<br>Guinean | Ex-<br>patriate | Persons | Male   | Female | Persons | Papua<br>New<br>Guinean | Ex-<br>patriate | Persons | Male   | Female | Persons |

*Primary (Papua New Guinea Curriculum)*

|         |       |     |       |        |        |        |       |     |       |        |        |         |       |       |       |         |        |         |
|---------|-------|-----|-------|--------|--------|--------|-------|-----|-------|--------|--------|---------|-------|-------|-------|---------|--------|---------|
| 1968 .. | 1,717 | 350 | 2,067 | 46,463 | 25,449 | 71,912 | 3,675 | 615 | 4,290 | 79,835 | 52,071 | 131,906 | 5,392 | 965   | 6,357 | 126,298 | 77,520 | 203,818 |
| 1969 .. | 1,861 | 346 | 2,207 | 48,378 | 26,326 | 74,704 | 3,663 | 695 | 4,358 | 81,119 | 50,963 | 132,082 | 5,524 | 1,041 | 6,565 | 129,497 | 77,289 | 206,786 |
| 1970 .. | 1,896 | 320 | 2,216 | 48,478 | 26,009 | 74,487 | 3,479 | 438 | 3,917 | 82,207 | 49,711 | 131,918 | 5,375 | 758   | 6,133 | 130,685 | 75,720 | 206,405 |
| 1971(c) | ..    | ..  | 2,383 | 50,107 | 26,695 | 76,802 | ..    | ..  | 4,022 | 85,792 | 50,726 | 136,518 | 5,517 | 888   | 6,405 | 135,899 | 77,421 | 213,320 |
| 1972(c) | ..    | ..  | 2,647 | 52,674 | 27,066 | 79,740 | ..    | ..  | 4,377 | 86,232 | 49,732 | 135,964 | 6,071 | 953   | 7,024 | 138,906 | 76,798 | 215,704 |

*Primary\* (Other Curricula)(a)*

|         |    |     |     |       |       |        |    |    |    |     |     |       |     |     |     |       |       |        |
|---------|----|-----|-----|-------|-------|--------|----|----|----|-----|-----|-------|-----|-----|-----|-------|-------|--------|
| 1968 .. | 4  | 166 | 170 | 2,512 | 2,354 | 4,866  | 1  | 58 | 59 | 458 | 502 | 960   | 5   | 224 | 229 | 2,970 | 2,856 | 5,826  |
| 1969 .. | 6  | 180 | 186 | 2,811 | 2,639 | 5,450  | 1  | 43 | 44 | 571 | 587 | 1,158 | 7   | 223 | 230 | 3,382 | 3,226 | 6,608  |
| 1970 .. | 52 | 217 | 269 | 4,180 | 3,566 | 7,746  | .. | 37 | 37 | 550 | 557 | 1,107 | 52  | 254 | 306 | 4,730 | 4,123 | 8,853  |
| 1971 .. | .. | ..  | 307 | 5,760 | 4,572 | 10,332 | .. | .. | 26 | 511 | 491 | 1,002 | 291 | 42  | 333 | 6,271 | 5,063 | 11,334 |
| 1972 .. | .. | ..  | 327 | 6,072 | 4,943 | 11,015 | .. | .. | 30 | 520 | 460 | 980   | 312 | 45  | 357 | 6,592 | 5,403 | 11,995 |

*Total Primary*

|         |       |     |       |        |        |        |       |     |       |        |        |         |       |       |       |         |        |         |
|---------|-------|-----|-------|--------|--------|--------|-------|-----|-------|--------|--------|---------|-------|-------|-------|---------|--------|---------|
| 1968(b) | 1,721 | 516 | 2,237 | 48,975 | 27,803 | 76,778 | 3,676 | 673 | 4,349 | 80,293 | 52,573 | 132,866 | 5,397 | 1,189 | 6,587 | 129,268 | 80,376 | 209,644 |
| 1969 .. | 1,867 | 526 | 2,393 | 51,189 | 28,965 | 80,154 | 3,664 | 738 | 4,402 | 81,690 | 51,550 | 133,240 | 5,531 | 1,264 | 6,795 | 132,879 | 80,515 | 213,394 |
| 1970 .. | 1,948 | 537 | 2,485 | 52,658 | 29,575 | 82,233 | 3,479 | 475 | 3,954 | 82,757 | 50,268 | 133,025 | 5,427 | 1,012 | 6,439 | 135,415 | 79,843 | 215,258 |
| 1971(c) | ..    | ..  | 2,690 | 55,867 | 31,267 | 87,134 | ..    | ..  | 4,048 | 86,303 | 51,217 | 137,520 | 5,808 | 930   | 6,738 | 142,170 | 82,484 | 224,654 |
| 1972(c) | ..    | ..  | 2,974 | 58,746 | 32,009 | 90,755 | ..    | ..  | 4,407 | 86,752 | 50,192 | 136,944 | 6,383 | 998   | 7,381 | 145,498 | 82,201 | 227,699 |

(a) Primary\* schools follow Australian, Dual or Variable Curricula.

(b) 1968 Total Primary figures originally included exempt schools. Amended figures exclude them.

(c) 1971 and 1972 figures for Non-Government Primary (P.N.G. Curriculum) and Total Primary includes some school data outside the P.N.G. Education System too.



## 3. GOVERNMENT AND NON-GOVERNMENT POST-PRIMARY SCHOOLS: TEACHERS AND PUPILS AT 30 JUNE 1968 TO 1972

| At<br>30 June               | Government              |                 |         |        |        |           | Non-Government          |                 |         |        |        |           | Total                   |                 |         |        |        |         |
|-----------------------------|-------------------------|-----------------|---------|--------|--------|-----------|-------------------------|-----------------|---------|--------|--------|-----------|-------------------------|-----------------|---------|--------|--------|---------|
|                             | Teachers                |                 |         | Pupils |        |           | Teachers                |                 |         | Pupils |        |           | Teachers                |                 |         | Pupils |        |         |
|                             | Papua<br>New<br>Guinean | Ex-<br>patriate | Persons | Male   | Female | Persons   | Papua<br>New<br>Guinean | Ex-<br>patriate | Persons | Male   | Female | Persons   | Papua<br>New<br>Guinean | Ex-<br>patriate | Persons | Male   | Female | Persons |
|                             |                         |                 |         |        |        |           |                         |                 |         |        |        |           |                         |                 |         |        |        |         |
| <i>High Schools</i>         |                         |                 |         |        |        |           |                         |                 |         |        |        |           |                         |                 |         |        |        |         |
| 1968 ..                     | 55                      | 354             | 409     | 6,335  | 2,144  | 8,479     | 24                      | 242             | 266     | 4,279  | 1,560  | 5,839     | 79                      | 596             | 675     | 10,614 | 3,704  | 14,318  |
| 1969 ..                     | 58                      | 430             | 488     | 7,110  | 2,463  | 9,573     | 25                      | 285             | 310     | 4,807  | 1,889  | 6,696     | 83                      | 715             | 798     | 11,917 | 4,352  | 16,269  |
| 1970 ..                     | 78                      | 435             | 513     | 7,932  | 2,839  | 10,771    | 32                      | 262             | 294     | 5,500  | 2,442  | 7,942     | 110                     | 697             | 807     | 13,432 | 5,281  | 18,713  |
| 1971 ..                     | ..                      | ..              | 554     | 8,568  | 3,395  | 11,963    | ..                      | ..              | 304     | 5,806  | 2,915  | 8,721     | 139                     | 719             | 858     | 14,374 | 6,310  | 20,684  |
| 1972 ..                     | 122                     | 492             | 614     | 9,620  | 4,188  | 13,808    | 57                      | 408             | 465     | 7,055  | 3,472  | 10,527    | 179                     | 900             | 1,079   | 16,675 | 7,660  | 24,335  |
| <i>Technical/Vocational</i> |                         |                 |         |        |        |           |                         |                 |         |        |        |           |                         |                 |         |        |        |         |
| 1968 ..                     | 48                      | 142             | 190     | 2,488  | 218    | 2,706     | 11                      | 41              | 52      | 369    | 151    | 520       | 59                      | 183             | 242     | 2,857  | 369    | 3,226   |
| 1969 ..                     | 65                      | 171             | 236     | 3,115  | 357    | 3,472     | 9                       | 43              | 52      | 345    | 334    | 679       | 74                      | 214             | 288     | 3,460  | 691    | 4,151   |
| 1970 ..                     | 79                      | 186             | 265     | 3,333  | 542    | 3,875     | 9                       | 26              | 35      | 318    | 522    | 840       | 88                      | 212             | 300     | 3,651  | 1,064  | 4,715   |
| 1971 ..                     | 41                      | 205             | 246     | 3,569  | 551    | 4,120     | 11                      | 24              | 35      | 317    | 464    | 781       | 52                      | 229             | 281     | 3,886  | 1,015  | 4,901   |
| 1972 ..                     | 74                      | 262             | 336     | 4,439  | 632    | 5,071     | 19                      | 34              | 53      | 366    | 578    | 944       | 93                      | 296             | 389     | 4,805  | 1,210  | 6,015   |
| <i>Teacher Training</i>     |                         |                 |         |        |        |           |                         |                 |         |        |        |           |                         |                 |         |        |        |         |
| 1968 ..                     | 4                       | 70              | 74      | 466    | 146    | 612       | 19                      | 80              | 99      | 609    | 313    | 922       | 23                      | 150             | 173     | 1,075  | 459    | 1,534   |
| 1969 ..                     | 2                       | 101             | 103     | 532    | 156    | 688       | 7                       | 94              | 101     | 675    | 331    | 1,006     | 9                       | 195             | 204     | 1,207  | 487    | 1,694   |
| 1970 ..                     | 6                       | 99              | 105     | 480    | 188    | 668       | 10                      | 79              | 89      | 638    | 359    | 997       | 16                      | 178             | 194     | 1,118  | 547    | 1,665   |
| 1971 ..                     | ..                      | ..              | 125     | ..     | ..     | 856       | ..                      | ..              | 94      | ..     | ..     | 1,172     | 53                      | 166             | 219     | ..     | ..     | 2,028   |
| 1972 ..                     | 2                       | 108             | 110     | 621    | 279    | 900       | 27                      | 76              | 103     | 618    | 418    | 1,036     | 29                      | 184             | 213     | 1,239  | 697    | 1,936   |
| <i>Total Post-Primary</i>   |                         |                 |         |        |        |           |                         |                 |         |        |        |           |                         |                 |         |        |        |         |
| 1968 ..                     | 107                     | 566             | 673     | 9,289  | 2,508  | 11,797    | 54                      | 363             | 417     | 5,257  | 2,024  | 7,281     | 161                     | 929             | 1,090   | 14,546 | 4,532  | 19,078  |
| 1969 ..                     | 125                     | 702             | 827     | 10,757 | 2,976  | 13,733    | 41                      | 422             | 463     | 5,827  | 2,554  | 8,381     | 166                     | 1,124           | 1,290   | 16,584 | 5,530  | 22,114  |
| 1970 ..                     | 163                     | 720             | 883     | 11,745 | 3,569  | 15,314    | 51                      | 367             | 418     | 6,456  | 3,323  | 9,779     | 214                     | 1,087           | 1,301   | 18,201 | 6,892  | 25,093  |
| 1971 ..                     | ..                      | ..              | 925     | 12,137 | 3,946  | (a)16,939 | ..                      | ..              | 433     | 6,123  | 3,379  | (a)10,674 | 244                     | 1,114           | 1,358   | 18,260 | 7,325  | a27,613 |
| 1972 ..                     | 198                     | 862             | 1,060   | 14,680 | 5,099  | 19,779    | 103                     | 518             | 621     | 8,039  | 4,468  | 12,507    | 301                     | 1,380           | 1,681   | 22,719 | 9,567  | 32,286  |

(a) Teacher college enrolments included only in Total Persons.

## 4. GOVERNMENT AND NON-GOVERNMENT SCHOOLS: NUMBER AND TYPE AT 30 JUNE 1968 TO 1972

| At 30 June | Government  |             |      |                          |                  |       | Non-Government |             |      |                          |                  |       | Total       |             |      |                          |                  |       |
|------------|-------------|-------------|------|--------------------------|------------------|-------|----------------|-------------|------|--------------------------|------------------|-------|-------------|-------------|------|--------------------------|------------------|-------|
|            | Primary (a) | Primary (b) | High | Technical and vocational | Teacher training | Total | Primary (a)    | Primary (b) | High | Technical and vocational | Teacher training | Total | Primary (a) | Primary (b) | High | Technical and vocational | Teacher training | Total |
| 1968 ..    | 44          | 413         | 27   | 41                       | 3                | 528   | 14             | 1,223       | 34   | 13                       | 14               | 1,298 | 58          | 1,636       | 61   | 54                       | 17               | 1,826 |
| 1969 ..    | 45          | 445         | 28   | 48                       | 3                | 569   | 13             | 1,159       | 33   | 19                       | 12               | 1,236 | 58          | 1,604       | 61   | 67                       | 15               | 1,805 |
| 1970 ..    | 50          | 451         | 29   | 52                       | 3                | 585   | 13             | 1,106       | 33   | 18                       | 9                | 1,179 | 63          | 1,557       | 62   | 70                       | 12               | 1,764 |
| 1971 ..    | 53          | 469         | 33   | 54                       | 3                | 612   | 12             | 1,079       | 32   | 21                       | 9                | 1,153 | 65          | 1,548       | 65   | 75                       | 12               | 1,765 |
| 1972 ..    | 55          | 499         | 36   | 55                       | 3                | 648   | 11             | 1,093       | 35   | 25                       | 8                | 1,172 | 66          | 1,592       | 71   | 80                       | 11               | 1,820 |

(a) These schools follow Australian, Dual or Variable curricula. (b) These schools follow the PNG curriculum.

## 5. GOVERNMENT AND NON-GOVERNMENT SCHOOLS: NUMBER AND TYPE OF SCHOOL AND TOTAL ENROLMENTS BY DISTRICT AND CONTROLLING AUTHORITY AT 30 JUNE 1972

## Papua

| Controlling authority    | Primary           |                  |                   |                  | Secondary         |                  |                   |                  | Technical          |                  | Vocational        |                  | Teachers colleges  |                  |
|--------------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|--------------------|------------------|-------------------|------------------|--------------------|------------------|
|                          | Papua New Guinean |                  | Other             |                  | Papua New Guinean |                  | Other             |                  | Number of colleges | Total enrolments | Number of centres | Total enrolments | Number of colleges | Total enrolments |
|                          | Number of schools | Total enrolments | Number of schools | Total enrolments | Number of schools | Total enrolments | Number of schools | Total enrolments |                    |                  |                   |                  |                    |                  |
| Western—                 |                   |                  |                   |                  |                   |                  |                   |                  |                    |                  |                   |                  |                    |                  |
| Administration ..        | 18                | 3,140            | 1                 | 55               | 1                 | 436              | ..                | ..               | ..                 | ..               | 2                 | 86               | ..                 | ..               |
| Evangelical Alliance ..  | 18                | 3,114            | ..                | ..               | 1                 | 393              | ..                | ..               | ..                 | ..               | 1                 | 37               | ..                 | ..               |
| United ..                | 6                 | 413              | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | 1                 | 16               | ..                 | ..               |
| Catholic ..              | 7                 | 1,111            | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| Seventh Day Adventist .. | 1                 | 37               | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| Total ..                 | 50                | 7,815            | 1                 | 55               | 2                 | 829              | ..                | ..               | ..                 | ..               | 4                 | 139              | ..                 | ..               |
| Gulf—                    |                   |                  |                   |                  |                   |                  |                   |                  |                    |                  |                   |                  |                    |                  |
| Administration ..        | 16                | 2,738            | 1                 | 358              | 1                 | 348              | ..                | ..               | ..                 | ..               | 2                 | 45               | ..                 | ..               |
| United ..                | 18                | 1,925            | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | 1                 | 36               | ..                 | ..               |
| Catholic ..              | 9                 | 1,289            | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| Other ..                 | 1                 | 221              | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| Seventh Day Adventist .. | 6                 | 347              | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| Total ..                 | 50                | 6,520            | 1                 | 358              | 1                 | 348              | ..                | ..               | ..                 | ..               | 3                 | 81               | ..                 | ..               |

Central—  
 Administration .. ..  
 Anglican .. ..  
 United .. ..  
 Catholic .. ..  
 Other .. ..  
 Seventh Day Adventist .. ..

|    |        |    |       |   |       |   |     |   |     |    |     |   |     |
|----|--------|----|-------|---|-------|---|-----|---|-----|----|-----|---|-----|
| 43 | 10,722 | 14 | 3,215 | 8 | 2,151 | 2 | 803 | 2 | 546 | 11 | 525 | 1 | 307 |
| 21 | 174    |    |       |   |       |   |     |   |     |    |     |   |     |
| 40 | 1,992  |    |       |   |       |   |     |   |     |    |     |   |     |
| 4  | 6,623  | 1  | 491   | 4 | 1,095 |   |     |   |     | 2  | 66  |   |     |
| 10 | 418    |    |       |   |       |   |     |   |     |    |     |   |     |
|    | 895    |    |       |   |       |   |     |   |     |    |     |   |     |

Total .. ..

Milne Bay—  
 Administration .. ..  
 Anglican .. ..  
 United .. ..  
 Catholic .. ..  
 Seventh Day Adventist .. ..

|     |        |    |       |   |       |   |     |   |     |    |     |   |     |
|-----|--------|----|-------|---|-------|---|-----|---|-----|----|-----|---|-----|
| 119 | 20,824 | 14 | 3,706 | 9 | 3,246 | 2 | 803 | 2 | 546 | 11 | 591 | 1 | 307 |
| 30  | 3,421  | 2  | 498   | 1 | 495   |   |     |   |     | 1  | 48  |   |     |
| 14  | 1,696  |    |       | 1 | 298   |   |     |   |     |    |     |   |     |
| 31  | 2,935  |    |       | 1 | 316   |   |     |   |     | 1  | 52  |   |     |
| 42  | 3,590  |    |       | 1 | 370   |   |     |   |     | 1  | 34  |   |     |
| 3   | 154    |    |       |   |       |   |     |   |     |    |     |   |     |

Total .. ..

Northern—  
 Administration .. ..  
 Anglican .. ..  
 Seventh Day Adventist .. ..

|    |       |   |    |   |     |  |  |  |  |   |     |  |  |
|----|-------|---|----|---|-----|--|--|--|--|---|-----|--|--|
| 16 | 2,651 | 1 | 84 | 1 | 426 |  |  |  |  | 2 | 232 |  |  |
| 32 | 4,715 |   |    | 1 | 394 |  |  |  |  |   |     |  |  |
| 4  | 167   |   |    |   |     |  |  |  |  |   |     |  |  |

Total .. ..

Southern Highlands—  
 Administration .. ..  
 Evangelical Alliance .. ..  
 Lutheran .. ..  
 United .. ..  
 Catholic .. ..  
 Other .. ..  
 Seventh Day Adventist .. ..  
 Non S.D.A. .. ..

|    |       |   |     |   |     |  |  |  |  |   |     |   |    |
|----|-------|---|-----|---|-----|--|--|--|--|---|-----|---|----|
| 37 | 4,908 | 2 | 251 | 1 | 325 |  |  |  |  | 3 | 129 | 1 | 90 |
| 17 | 2,288 |   |     |   |     |  |  |  |  |   |     |   |    |
| 4  | 581   |   |     |   |     |  |  |  |  |   |     |   |    |
| 5  | 589   |   |     |   |     |  |  |  |  |   |     |   |    |
| 18 | 2,179 |   |     | 1 | 205 |  |  |  |  |   |     |   |    |
| 1  | 101   |   |     |   |     |  |  |  |  |   |     |   |    |
| 2  | 113   |   |     |   |     |  |  |  |  |   |     |   |    |
| 1  | 114   |   |     |   |     |  |  |  |  |   |     |   |    |

Total .. ..

Eastern Highlands—  
 Administration .. ..  
 Anglican .. ..  
 Evangelical Alliance .. ..  
 Lutheran .. ..  
 Catholic .. ..  
 Other .. ..  
 Seventh Day Adventist .. ..

|    |       |   |     |   |     |  |  |   |     |   |     |   |     |
|----|-------|---|-----|---|-----|--|--|---|-----|---|-----|---|-----|
| 44 | 6,870 | 3 | 440 | 1 | 597 |  |  | 1 | 342 | 2 | 139 | 1 | 331 |
| 1  | 114   |   |     |   |     |  |  |   |     |   |     |   |     |
| 5  | 798   |   |     |   |     |  |  |   |     |   |     |   |     |
| 13 | 1,771 |   |     | 1 | 382 |  |  |   |     |   |     |   |     |
| 4  | 718   |   |     |   |     |  |  |   |     |   |     |   |     |
| 5  | 605   |   |     | 1 | 89  |  |  |   |     | 1 | 25  |   |     |
| 9  | 990   | 1 | 27  | 1 | 330 |  |  |   |     |   |     |   |     |

Total .. ..

5. GOVERNMENT AND NON-GOVERNMENT SCHOOLS: NUMBER AND TYPE OF SCHOOL AND TOTAL ENROLMENTS BY DISTRICT AND CONTROLLING AUTHORITY  
AT 30 JUNE 1972—continued

## New Guinea

| Controlling authority        | Primary           |                  |                   |                  | Secondary         |                  |                   |                  | Technical          |                  | Vocational        |                  | Teachers colleges  |                  |
|------------------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|--------------------|------------------|-------------------|------------------|--------------------|------------------|
|                              | Papua New Guinean |                  | Other             |                  | Papua New Guinean |                  | Other             |                  | Number of colleges | Total enrolments | Number of centres | Total enrolments | Number of colleges | Total enrolments |
|                              | Number of schools | Total enrolments | Number of schools | Total enrolments | Number of schools | Total enrolments | Number of schools | Total enrolments |                    |                  |                   |                  |                    |                  |
| <b>Eastern Highlands—</b>    |                   |                  |                   |                  |                   |                  |                   |                  |                    |                  |                   |                  |                    |                  |
| Administration .. .. .       | 39                | 5,940            | 3                 | 421              | 1                 | 540              | ..                | ..               | 1                  | 227              | 2                 | 154              | 1                  | 346              |
| Anglican .. .. .             | 1                 | 78               | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| Evangelical Alliance .. .. . | 5                 | 851              | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| Lutheran .. .. .             | 13                | 1,719            | ..                | ..               | 1                 | 360              | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| Catholic .. .. .             | 4                 | 699              | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| Other .. .. .                | 5                 | 496              | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | 1                 | 16               | ..                 | ..               |
| <b>Total .. .. .</b>         | <b>67</b>         | <b>9,783</b>     | <b>3</b>          | <b>421</b>       | <b>2</b>          | <b>900</b>       | <b>..</b>         | <b>..</b>        | <b>1</b>           | <b>227</b>       | <b>3</b>          | <b>170</b>       | <b>1</b>           | <b>346</b>       |
| <b>Chimbu—</b>               |                   |                  |                   |                  |                   |                  |                   |                  |                    |                  |                   |                  |                    |                  |
| Administration .. .. .       | 29                | 4,535            | 1                 | 67               | 1                 | 329              | ..                | ..               | ..                 | ..               | 1                 | 43               | ..                 | ..               |
| Anglican .. .. .             | 4                 | 494              | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| Evangelical Alliance .. .. . | 1                 | 60               | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| Lutheran .. .. .             | 8                 | 995              | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| Catholic .. .. .             | 24                | 4,246            | ..                | ..               | 1                 | 224              | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| <b>Total .. .. .</b>         | <b>66</b>         | <b>10,330</b>    | <b>1</b>          | <b>67</b>        | <b>2</b>          | <b>553</b>       | <b>..</b>         | <b>..</b>        | <b>..</b>          | <b>..</b>        | <b>1</b>          | <b>43</b>        | <b>..</b>          | <b>..</b>        |
| <b>Western Highlands—</b>    |                   |                  |                   |                  |                   |                  |                   |                  |                    |                  |                   |                  |                    |                  |
| Administration .. .. .       | 32                | 5,142            | 4                 | 815              | 1                 | 426              | ..                | ..               | ..                 | ..               | 2                 | 93               | ..                 | ..               |
| Anglican .. .. .             | 3                 | 253              | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| Evangelical Alliance .. .. . | 16                | 1,556            | 2                 | 37               | ..                | ..               | ..                | ..               | ..                 | ..               | 1                 | 34               | ..                 | ..               |
| Lutheran .. .. .             | 18                | 2,510            | 1                 | 75               | 1                 | 278              | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| Catholic .. .. .             | 32                | 6,865            | ..                | ..               | 2                 | 470              | ..                | ..               | ..                 | ..               | 1                 | 39               | 1                  | 164              |
| <b>Total .. .. .</b>         | <b>101</b>        | <b>16,326</b>    | <b>7</b>          | <b>927</b>       | <b>4</b>          | <b>1,174</b>     | <b>..</b>         | <b>..</b>        | <b>..</b>          | <b>..</b>        | <b>4</b>          | <b>166</b>       | <b>1</b>           | <b>164</b>       |
| <b>West Sepik—</b>           |                   |                  |                   |                  |                   |                  |                   |                  |                    |                  |                   |                  |                    |                  |
| Administration .. .. .       | 17                | 1,980            | 1                 | 186              | 1                 | 74               | ..                | ..               | ..                 | ..               | 4                 | 217              | ..                 | ..               |
| Evangelical Alliance .. .. . | 8                 | 731              | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | 1                 | 16               | ..                 | ..               |
| Catholic .. .. .             | 35                | 4,551            | ..                | ..               | 1                 | 334              | ..                | ..               | ..                 | ..               | 1                 | 15               | ..                 | ..               |
| <b>Total .. .. .</b>         | <b>60</b>         | <b>7,262</b>     | <b>1</b>          | <b>186</b>       | <b>2</b>          | <b>408</b>       | <b>..</b>         | <b>..</b>        | <b>..</b>          | <b>..</b>        | <b>6</b>          | <b>248</b>       | <b>..</b>          | <b>..</b>        |

|                      |  |     |        |    |       |    |       |    |     |    |     |    |     |    |     |
|----------------------|--|-----|--------|----|-------|----|-------|----|-----|----|-----|----|-----|----|-----|
| East New Britain—    |  | 29  | 7,307  | 3  | 759   | 3  | 1,538 | 1  | 267 | 2  | 466 | 3  | 287 | 1  | 111 |
| Administration       |  | 18  | 1,918  | .. | ..    | 1  | 271   | .. | ..  | .. | ..  | 2  | 122 | .. | ..  |
| United               |  | 50  | 8,299  | 3  | 256   | 2  | 596   | .. | ..  | .. | ..  | .. | ..  | 2  | 111 |
| Catholic             |  |     |        |    |       |    |       |    |     |    |     |    |     | 1  | 196 |
| Total .. ..          |  | 97  | 17,524 | 6  | 1,015 | 6  | 2,405 | 1  | 267 | 2  | 466 | 5  | 409 | 3  | 307 |
| New Ireland—         |  |     |        |    |       |    |       |    |     |    |     |    |     |    |     |
| Administration       |  | 23  | 2,570  | 1  | 85    | 2  | 445   | .. | ..  | .. | ..  | 1  | 30  | .. | ..  |
| United               |  | 23  | 1,527  | .. | ..    | 1  | 136   | .. | ..  | .. | ..  | .. | ..  | .. | ..  |
| Catholic             |  | 45  | 4,254  | 1  | 78    | 1  | 371   | .. | ..  | .. | ..  | 1  | 32  | .. | ..  |
| Total .. ..          |  | 91  | 8,351  | 2  | 163   | 4  | 952   | .. | ..  | .. | ..  | 2  | 62  | .. | ..  |
| Bougainville—        |  |     |        |    |       |    |       |    |     |    |     |    |     |    |     |
| Administration       |  | 15  | 1,701  | 4  | 368   | 2  | 593   | .. | ..  | .. | ..  | 3  | 169 | .. | ..  |
| United               |  | 18  | 1,631  | .. | ..    | .. | ..    | .. | ..  | .. | ..  | 1  | 76  | .. | ..  |
| Catholic             |  | 75  | 9,962  | .. | ..    | .. | ..    | .. | ..  | .. | ..  | 2  | 69  | .. | ..  |
| Total .. ..          |  | 108 | 13,294 | 4  | 368   | 2  | 593   | .. | ..  | .. | ..  | 6  | 314 | .. | ..  |
| Manus—               |  |     |        |    |       |    |       |    |     |    |     |    |     |    |     |
| Administration       |  | 20  | 1,657  | 2  | 191   | 1  | 461   | .. | ..  | .. | ..  | 3  | 72  | .. | ..  |
| Evangelical Alliance |  | 10  | 546    | .. | ..    | .. | ..    | .. | ..  | .. | ..  | .. | ..  | .. | ..  |
| Catholic             |  | 19  | 1,231  | .. | ..    | 1  | 150   | .. | ..  | .. | ..  | 1  | 35  | .. | ..  |
| Total .. ..          |  | 49  | 3,434  | 2  | 191   | 2  | 611   | .. | ..  | .. | ..  | 4  | 107 | .. | ..  |
| East Sepik—          |  |     |        |    |       |    |       |    |     |    |     |    |     |    |     |
| Administration       |  | 35  | 5,505  | 3  | 546   | 2  | 701   | .. | ..  | .. | ..  | 3  | 193 | .. | ..  |
| Evangelical Alliance |  | 13  | 1,316  | .. | ..    | .. | ..    | .. | ..  | .. | ..  | .. | ..  | .. | ..  |
| Catholic             |  | 45  | 8,307  | .. | ..    | 2  | 558   | .. | ..  | 1  | 11  | .. | ..  | 1  | 128 |
| Total .. ..          |  | 93  | 15,128 | 3  | 546   | 4  | 1,259 | .. | ..  | 1  | 11  | 3  | 193 | 1  | 128 |
| Madang—              |  |     |        |    |       |    |       |    |     |    |     |    |     |    |     |
| Administration       |  | 28  | 5,241  | 1  | 376   | 2  | 872   | .. | ..  | 1  | 232 | 4  | 147 | 1  | 239 |
| Anglican             |  | 4   | 450    | .. | ..    | .. | ..    | .. | ..  | .. | ..  | .. | ..  | .. | ..  |
| Evangelical Alliance |  | 3   | 310    | .. | ..    | .. | ..    | .. | ..  | .. | ..  | .. | ..  | .. | ..  |
| Lutheran             |  | 27  | 3,906  | .. | ..    | .. | ..    | .. | ..  | .. | ..  | .. | ..  | .. | ..  |
| Catholic             |  | 35  | 7,207  | .. | ..    | 2  | 649   | .. | ..  | .. | ..  | 1  | 48  | .. | ..  |
| Total .. ..          |  | 97  | 17,114 | 1  | 376   | 4  | 1,521 | .. | ..  | 1  | 232 | 5  | 195 | 1  | 239 |

5. GOVERNMENT AND NON-GOVERNMENT SCHOOLS: NUMBER AND TYPE OF SCHOOL AND TOTAL ENROLMENTS BY DISTRICT AND CONTROLLING AUTHORITY  
AT 30 JUNE 1972--continued

| Controlling authority | Primary           |                  |                   |                  | Secondary         |                  |                   |                  | Technical          |                  | Vocational        |                  | Teachers colleges  |                  |
|-----------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|--------------------|------------------|-------------------|------------------|--------------------|------------------|
|                       | Papua New Guinean |                  | Other             |                  | Papua New Guinean |                  | Other             |                  | Number of colleges | Total enrolments | Number of centres | Total enrolments | Number of colleges | Total enrolments |
|                       | Number of schools | Total enrolments | Number of schools | Total enrolments | Number of schools | Total enrolments | Number of schools | Total enrolments |                    |                  |                   |                  |                    |                  |
| Morobe--              |                   |                  |                   |                  |                   |                  |                   |                  |                    |                  |                   |                  |                    |                  |
| Administration .. ..  | 42                | 6,929            | 7                 | 2,137            | 3                 | 932              | 1                 | 240              | 1                  | 296              | 3                 | 171              | ..                 | ..               |
| Lutheran .. ..        | 71                | 8,552            | 1                 | 33               | 2                 | 549              | ..                | ..               | ..                 | 73               | ..                | ..               | 1                  | 238              |
| Catholic .. ..        | 5                 | 820              | ..                | ..               | ..                | ..               | ..                | ..               | 1                  | ..               | ..                | ..               | ..                 | ..               |
| Total .. ..           | 118               | 16,301           | 8                 | 2,170            | 5                 | 1,481            | 1                 | 240              | 2                  | 369              | 3                 | 171              | 1                  | 238              |
| West New Britain--    |                   |                  |                   |                  |                   |                  |                   |                  |                    |                  |                   |                  |                    |                  |
| Administration .. ..  | 11                | 1,683            | 2                 | 159              | 1                 | 79               | ..                | ..               | ..                 | ..               | 2                 | 69               | ..                 | ..               |
| Anglican .. ..        | 3                 | 225              | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| United .. ..          | 3                 | 499              | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| Catholic .. ..        | 40                | 5,952            | ..                | ..               | ..                | ..               | ..                | ..               | ..                 | ..               | ..                | ..               | ..                 | ..               |
| Total .. ..           | 57                | 8,359            | 2                 | 159              | 1                 | 79               | ..                | ..               | ..                 | ..               | 2                 | 69               | ..                 | ..               |

| Academic level  | Government                  |               |                    |              | Non-government              |               |                    |            | Total                       |               |                    |              | Total Persons  |  |
|-----------------|-----------------------------|---------------|--------------------|--------------|-----------------------------|---------------|--------------------|------------|-----------------------------|---------------|--------------------|--------------|----------------|--|
|                 | Papua New Guinea curriculum |               | Other Curricula(a) |              | Papua New Guinea curriculum |               | Other curricula(a) |            | Papua New Guinea curriculum |               | Other curricula(a) |              |                |  |
|                 | Male                        | Female        | Male               | Female       | Male                        | Female        | Male               | Female     | Male                        | Female        | Male               | Female       |                |  |
| <b>Primary—</b> |                             |               |                    |              |                             |               |                    |            |                             |               |                    |              |                |  |
| Preparatory ..  | 1,091                       | 763           | 811                | 745          | 1,378                       | 855           | 60                 | 61         | 2,469                       | 1,618         | 880                | 806          | 5,773          |  |
| Standard 1 ..   | 10,358                      | 5,134         | 1,050              | 843          | 16,028                      | 9,798         | 89                 | 62         | 26,386                      | 14,932        | 1,139              | 905          | 43,362         |  |
| Standard 2 ..   | 9,834                       | 5,041         | 923                | 769          | 16,056                      | 9,785         | 84                 | 54         | 25,890                      | 14,826        | 1,007              | 823          | 42,546         |  |
| Standard 3 ..   | 8,774                       | 4,523         | 967                | 765          | 16,643                      | 9,625         | 80                 | 54         | 25,417                      | 14,148        | 1,047              | 829          | 41,441         |  |
| Standard 4 ..   | 9,217                       | 4,722         | 852                | 683          | 13,972                      | 7,707         | 72                 | 70         | 23,189                      | 12,429        | 924                | 753          | 37,295         |  |
| Standard 5 ..   | 6,622                       | 3,602         | 755                | 625          | 12,178                      | 6,814         | 61                 | 65         | 18,800                      | 10,416        | 816                | 690          | 30,722         |  |
| Standard 6 ..   | 6,778                       | 3,281         | 714                | 513          | 9,977                       | 5,148         | 65                 | 84         | 16,755                      | 8,429         | 779                | 597          | 26,560         |  |
| <b>Total ..</b> | <b>52,674</b>               | <b>27,066</b> | <b>6,072</b>       | <b>4,943</b> | <b>86,232</b>               | <b>49,732</b> | <b>520</b>         | <b>460</b> | <b>138,906</b>              | <b>76,798</b> | <b>6,592</b>       | <b>5,403</b> | <b>227,699</b> |  |

(a) Australian, Dual or Variable Curricula.

| Academic level    | High         |              | Technical    |            | Vocational   |            | High         |              | Technical  |           | Vocational |            | High          |              | Technical    |            | Vocational   |            | Total Persons |
|-------------------|--------------|--------------|--------------|------------|--------------|------------|--------------|--------------|------------|-----------|------------|------------|---------------|--------------|--------------|------------|--------------|------------|---------------|
|                   | Male         | Female       | Male         | Female     | Male         | Female     | Male         | Female       | Male       | Female    | Male       | Female     | Male          | Female       | Male         | Female     | Male         | Female     |               |
| <b>Secondary—</b> |              |              |              |            |              |            |              |              |            |           |            |            |               |              |              |            |              |            |               |
| Form 1 ..         | 3,016        | 1,371        | ..           | ..         | 2,499        | 300        | 2,447        | 1,266        | 75         | ..        | 250        | 554        | 5,463         | 2,637        | 75           | ..         | 2,749        | 854        | 11,778        |
| Form 2 ..         | 2,857        | 1,112        | ..           | ..         | 35           | ..         | 2,330        | 1,149        | 39         | ..        | 2          | 24         | 5,187         | 2,261        | 39           | ..         | 37           | 24         | 7,548         |
| Form 3 ..         | 1,499        | 581          | 1,134        | 230        | ..           | ..         | 1,293        | 645          | ..         | ..        | ..         | ..         | 2,792         | 1,226        | 1,134        | 230        | ..           | ..         | 5,382         |
| Form 4 ..         | 1,143        | 393          | 771          | 102        | ..           | ..         | 976          | 405          | ..         | ..        | ..         | ..         | 2,119         | 798          | 771          | 102        | ..           | ..         | 3,790         |
| Form 5 ..         | 191          | 49           | ..           | ..         | ..           | ..         | 4            | 3            | ..         | ..        | ..         | ..         | 195           | 52           | ..           | ..         | ..           | ..         | 247           |
| Form 6 ..         | 95           | 27           | ..           | ..         | ..           | ..         | 5            | 4            | ..         | ..        | ..         | ..         | 100           | 31           | ..           | ..         | ..           | ..         | 131           |
| <b>Total ..</b>   | <b>8,801</b> | <b>3,533</b> | <b>1,905</b> | <b>332</b> | <b>2,534</b> | <b>300</b> | <b>7,055</b> | <b>3,472</b> | <b>114</b> | <b>..</b> | <b>252</b> | <b>578</b> | <b>15,856</b> | <b>7,005</b> | <b>2,019</b> | <b>332</b> | <b>2,786</b> | <b>878</b> | <b>28,876</b> |

| Academic level           | Male       |            | Female     |            | Male         |            | Female       |  | Male |  | Female |  | Total Persons |
|--------------------------|------------|------------|------------|------------|--------------|------------|--------------|--|------|--|--------|--|---------------|
| <b>Teacher Training—</b> |            |            |            |            |              |            |              |  |      |  |        |  |               |
| Year 1 ..                | 232        | 106        | 263        | 201        | 495          | 307        | 802          |  |      |  |        |  |               |
| Year 2 ..                | 325        | 149        | 355        | 217        | 680          | 366        | 1,046        |  |      |  |        |  |               |
| Year 3 ..                | 64         | 24         | ..         | ..         | 64           | 24         | 88           |  |      |  |        |  |               |
| <b>Total ..</b>          | <b>621</b> | <b>279</b> | <b>618</b> | <b>418</b> | <b>1,239</b> | <b>697</b> | <b>1,936</b> |  |      |  |        |  |               |

## 7. GOVERNMENT AND NON-GOVERNMENT PUPILS: ENROLMENTS IN TYPE OF SCHOOL BY ETHNIC GROUP AND DISTRICT AT 30 JUNE 1972

| Ethnic group and district | Primary*(a)  |              |              | Primary(b)     |               |                | Secondary     |              |               | Technical    |            |              | Vocational   |            |              | Total          |               |                |
|---------------------------|--------------|--------------|--------------|----------------|---------------|----------------|---------------|--------------|---------------|--------------|------------|--------------|--------------|------------|--------------|----------------|---------------|----------------|
|                           | Male         | Female       | Persons      | Male           | Female        | Persons        | Male          | Female       | Persons       | Male         | Female     | Persons      | Male         | Female     | Persons      | Male           | Female        | Persons        |
| <i>Papua New Guinean—</i> |              |              |              |                |               |                |               |              |               |              |            |              |              |            |              |                |               |                |
| Western .. ..             | 10           | 3            | 13           | 4,844          | 2,952         | 7,796          | 617           | 204          | 821           | ..           | ..         | ..           | 123          | 16         | 139          | 5,594          | 3,175         | 8,769          |
| Gulf .. ..                | 202          | 148          | 350          | 3,964          | 2,547         | 6,511          | 223           | 124          | 347           | ..           | ..         | ..           | 64           | 17         | 81           | 4,453          | 2,836         | 7,289          |
| Central .. ..             | 608          | 456          | 1,064        | 12,045         | 8,524         | 20,569         | 2,194         | 1,225        | 3,419         | 466          | 78         | 544          | 413          | 176        | 589          | 15,726         | 10,459        | 26,185         |
| Milne Bay .. ..           | 235          | 207          | 442          | 6,896          | 4,877         | 11,773         | 756           | 720          | 1,476         | ..           | ..         | ..           | 82           | 52         | 134          | 7,969          | 5,856         | 13,825         |
| Northern .. ..            | 13           | 10           | 23           | 4,577          | 2,939         | 7,516          | 686           | 127          | 813           | ..           | ..         | ..           | 180          | 52         | 232          | 5,456          | 3,128         | 8,584          |
| Southern Highlands        | 127          | 46           | 173          | 8,219          | 2,651         | 10,870         | 433           | 97           | 530           | ..           | ..         | ..           | 129          | ..         | 129          | 8,908          | 2,794         | 11,702         |
| Eastern Highlands ..      | 28           | 21           | 49           | 9,127          | 2,718         | 11,845         | 1,006         | 298          | 1,304         | 336          | 6          | 342          | 164          | ..         | 164          | 10,661         | 3,043         | 13,704         |
| Chimbu .. ..              | 7            | 3            | 10           | 8,927          | 2,770         | 11,697         | 586           | 97           | 683           | ..           | ..         | ..           | 74           | 24         | 98           | 9,594          | 2,894         | 12,488         |
| Western Highlands         | 193          | 105          | 298          | 14,360         | 3,851         | 18,211         | 946           | 325          | 1,271         | ..           | ..         | ..           | 216          | ..         | 216          | 15,715         | 4,281         | 19,996         |
| West Sepik .. ..          | 118          | 78           | 196          | 5,026          | 2,613         | 7,639          | 415           | 106          | 521           | ..           | ..         | ..           | 266          | 54         | 320          | 5,825          | 2,851         | 8,676          |
| East Sepik .. ..          | 223          | 99           | 322          | 11,314         | 5,414         | 16,728         | 1,048         | 458          | 1,506         | ..           | ..         | ..           | 175          | ..         | 175          | 12,760         | 5,971         | 18,731         |
| Madang .. ..              | 89           | 68           | 157          | 9,688          | 5,749         | 15,437         | 1,343         | 488          | 1,831         | 345          | ..         | 345          | 123          | 37         | 160          | 11,588         | 6,342         | 17,930         |
| Morobe .. ..              | 689          | 461          | 1,150        | 11,449         | 5,845         | 17,294         | 1,307         | 404          | 1,711         | 453          | 70         | 523          | 174          | 42         | 216          | 14,072         | 6,822         | 20,894         |
| West New Britain ..       | 94           | 49           | 143          | 4,796          | 3,743         | 8,539          | 190           | 49           | 239           | ..           | ..         | ..           | 85           | 51         | 136          | 5,165          | 3,892         | 9,057          |
| East New Britain ..       | 78           | 45           | 123          | 9,112          | 7,354         | 16,466         | 2,257         | 1,094        | 3,351         | 406          | 172        | 578          | 242          | 160        | 402          | 12,095         | 8,825         | 20,920         |
| New Ireland .. ..         | 18           | 27           | 45           | 4,691          | 4,090         | 8,781          | 609           | 429          | 1,038         | ..           | ..         | ..           | 30           | 25         | 55           | 5,348          | 4,571         | 9,919          |
| Bougainville .. ..        | 64           | 64           | 128          | 7,468          | 6,278         | 13,746         | 869           | 430          | 1,299         | ..           | ..         | ..           | 181          | 136        | 317          | 8,582          | 6,908         | 15,490         |
| Manus .. ..               | 93           | 75           | 168          | 2,116          | 1,642         | 3,758          | 376           | 322          | 698           | ..           | ..         | ..           | 65           | 20         | 85           | 2,650          | 2,059         | 4,709          |
| <b>Total .. ..</b>        | <b>2,889</b> | <b>1,965</b> | <b>4,854</b> | <b>138,619</b> | <b>76,556</b> | <b>215,175</b> | <b>15,860</b> | <b>6,997</b> | <b>22,857</b> | <b>2,006</b> | <b>326</b> | <b>2,332</b> | <b>2,786</b> | <b>862</b> | <b>3,648</b> | <b>162,160</b> | <b>86,706</b> | <b>248,866</b> |
| <i>European—</i>          |              |              |              |                |               |                |               |              |               |              |            |              |              |            |              |                |               |                |
| Western .. ..             | 15           | 11           | 26           | ..             | 2             | 2              | ..            | 1            | 1             | ..           | ..         | ..           | ..           | ..         | ..           | 15             | 14            | 29             |
| Gulf .. ..                | 5            | 3            | 8            | ..             | ..            | ..             | 1             | ..           | 1             | ..           | ..         | ..           | ..           | ..         | ..           | 6              | 3             | 9              |
| Central .. ..             | 1,168        | 1,128        | 2,296        | 1              | ..            | 1              | 268           | 229          | 407           | ..           | ..         | ..           | ..           | ..         | ..           | 1,437          | 1,357         | 2,794          |
| Milne Bay .. ..           | 14           | 19           | 33           | ..             | ..            | ..             | ..            | ..           | ..            | ..           | ..         | ..           | ..           | ..         | ..           | 14             | 19            | 33             |
| Northern .. ..            | 31           | 27           | 58           | ..             | ..            | ..             | ..            | ..           | ..            | ..           | ..         | ..           | ..           | ..         | ..           | 31             | 27            | 58             |
| Southern Highlands        | 39           | 35           | 74           | ..             | 1             | 1              | ..            | ..           | ..            | ..           | ..         | ..           | ..           | ..         | ..           | 39             | 36            | 75             |
| Eastern Highlands ..      | 201          | 184          | 385          | 2              | ..            | 2              | 44            | 43           | 87            | ..           | ..         | ..           | ..           | ..         | ..           | 247            | 227           | 474            |
| Chimbu .. ..              | 24           | 20           | 44           | ..             | ..            | ..             | ..            | ..           | ..            | ..           | ..         | ..           | ..           | ..         | ..           | 24             | 20            | 44             |
| Western Highlands ..      | 267          | 194          | 461          | ..             | ..            | ..             | ..            | ..           | ..            | ..           | ..         | ..           | ..           | ..         | ..           | 267            | 194           | 461            |
| West Sepik .. ..          | 6            | 4            | 10           | ..             | 2             | 2              | ..            | ..           | ..            | ..           | ..         | ..           | ..           | ..         | ..           | 6              | 6             | 12             |
| East Sepik .. ..          | 91           | 105          | 196          | ..             | ..            | ..             | ..            | 1            | 1             | ..           | ..         | ..           | ..           | ..         | ..           | 91             | 106           | 197            |
| Madang .. ..              | 139          | 122          | 261          | ..             | ..            | ..             | 4             | 1            | 5             | ..           | ..         | ..           | ..           | ..         | ..           | 143            | 123           | 266            |
| Morobe .. ..              | 525          | 520          | 1,045        | ..             | ..            | ..             | 96            | 75           | 171           | ..           | 1          | 1            | ..           | ..         | ..           | 621            | 596           | 1,217          |
| West New Britain ..       | 19           | 19           | 38           | 1              | 1             | 2              | ..            | ..           | ..            | ..           | ..         | ..           | ..           | ..         | ..           | 20             | 20            | 40             |
| East New Britain ..       | 190          | 169          | 359          | ..             | ..            | ..             | 32            | 21           | 53            | ..           | ..         | ..           | ..           | ..         | ..           | 222            | 190           | 412            |
| New Ireland .. ..         | 21           | 23           | 44           | ..             | ..            | ..             | ..            | ..           | ..            | ..           | ..         | ..           | ..           | ..         | ..           | 21             | 23            | 44             |
| Bougainville .. ..        | 208          | 244          | 452          | 2              | ..            | 2              | 9             | 22           | 31            | ..           | ..         | ..           | ..           | ..         | ..           | 219            | 266           | 485            |



| Manus              | 23         | 14         | 46         |            |            | 1          | 1          |            |            |           |           |           |           |            | 24         | 13         | 37           |
|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|-----------|------------|------------|------------|--------------|
| Total              | 2,986      | 2,840      | 5,826      | 6          | 6          | 12         | 455        | 393        | 848        | 1         | 1         | 1         | 1         | 1          | 3,447      | 6,246      | 6,687        |
| <i>Mixed Race—</i> |            |            |            |            |            |            |            |            |            |           |           |           |           |            |            |            |              |
| Western            | 8          | 6          | 14         | 1          | 1          | 2          | 2          | 3          | 5          |           |           |           |           |            | 11         | 10         | 21           |
| Gulf               |            |            |            | 3          | 4          | 7          |            |            |            |           |           |           |           |            | 3          | 4          | 7            |
| Central            | 110        | 83         | 193        | 107        | 112        | 219        | 71         | 38         | 109        | 2         |           |           |           | 290        | 235        | 525        |              |
| Milne Bay          | 12         | 8          | 20         | 9          | 12         | 21         | 2          |            | 2          |           |           |           |           | 23         | 20         | 43         |              |
| Northern           |            | 2          | 2          | 8          | 1          | 9          | 2          |            | 2          |           |           |           |           | 10         | 3          | 13         |              |
| Southern Highlands | 1          | 3          | 4          | 1          |            | 1          |            |            |            |           |           |           |           | 2          | 3          | 5          |              |
| Eastern Highlands  | 8          | 10         | 18         | 3          | 1          | 4          | 1          | 1          | 2          |           |           |           |           | 12         | 12         | 24         |              |
| Chimbu             | 2          |            | 2          | 14         | 5          | 19         | 4          |            | 4          |           |           |           |           | 20         | 5          | 25         |              |
| Western Highlands  | 13         | 13         | 26         | 22         | 9          | 31         |            |            |            |           |           |           |           | 35         | 22         | 57         |              |
| West Sepik         | 5          | 2          | 7          |            |            |            |            |            |            |           |           |           |           | 5          | 2          | 7          |              |
| East Sepik         | 22         | 10         | 32         | 1          | 2          | 3          |            |            |            |           |           |           |           | 23         | 12         | 35         |              |
| Madang             | 20         | 13         | 33         | 4          | 1          | 5          | 2          | 1          | 3          |           |           |           |           | 26         | 15         | 41         |              |
| Morobe             | 52         | 37         | 89         | 3          |            | 3          | 23         | 21         | 44         | 5         | 5         |           |           | 78         | 63         | 141        |              |
| West New Britain   | 5          | 3          | 8          |            |            |            |            | 1          | 1          |           |           |           |           | 5          | 4          | 9          |              |
| East New Britain   | 137        | 136        | 273        | 1          | 1          | 2          | 49         | 39         | 88         |           |           |           | 1         | 187        | 177        | 364        |              |
| New Ireland        | 41         | 38         | 79         | 7          | 8          | 15         |            | 1          | 1          |           |           |           |           | 48         | 47         | 95         |              |
| Bougainville       | 6          | 10         | 16         | 3          | 4          | 7          | 1          |            | 1          |           |           |           |           | 10         | 14         | 24         |              |
| Manus              | 3          | 3          | 6          |            |            |            |            |            |            |           |           |           |           | 3          | 3          | 6          |              |
| <b>Total</b>       | <b>445</b> | <b>377</b> | <b>822</b> | <b>187</b> | <b>161</b> | <b>348</b> | <b>157</b> | <b>105</b> | <b>262</b> | <b>2</b>  | <b>5</b>  | <b>7</b>  | <b>3</b>  | <b>3</b>   | <b>701</b> | <b>651</b> | <b>1,442</b> |
| <i>Asian—</i>      |            |            |            |            |            |            |            |            |            |           |           |           |           |            |            |            |              |
| Western            | 2          |            | 2          | 7          | 8          | 15         |            | 2          | 2          |           |           |           |           |            | 9          | 10         | 19           |
| Gulf               |            |            |            | 1          | 1          | 2          |            |            |            |           |           |           |           |            | 1          | 1          | 2            |
| Central            | 89         | 64         | 153        | 21         | 14         | 35         | 17         | 8          | 25         |           |           |           |           | 127        | 86         | 213        |              |
| Milne Bay          | 1          | 2          | 3          | 2          |            | 2          | 1          |            | 1          |           |           |           |           | 4          | 2          | 6          |              |
| Northern           |            | 1          | 1          | 5          | 3          | 8          | 3          | 2          | 5          |           |           |           |           | 8          | 6          | 14         |              |
| Southern Highlands |            |            |            | 1          |            | 1          |            |            |            |           |           |           |           | 1          |            | 1          |              |
| Eastern Highlands  | 7          | 8          | 15         | 5          | 10         | 15         | 3          | 2          | 5          |           |           |           |           | 15         | 20         | 35         |              |
| Chimbu             | 1          | 4          | 5          | 1          | 4          | 5          |            |            |            |           |           |           |           | 2          | 8          | 10         |              |
| Western Highlands  | 10         | 9          | 19         | 8          |            | 8          |            |            |            |           |           |           |           | 18         | 9          | 27         |              |
| West Sepik         | 1          |            | 1          |            | 2          | 2          |            |            |            |           |           |           |           | 1          | 2          | 3          |              |
| East Sepik         | 7          | 5          | 12         | 3          |            | 3          |            |            |            |           |           |           |           | 10         | 5          | 15         |              |
| Madang             | 4          | 11         | 15         | 14         | 9          | 23         | 2          | 1          | 3          |           |           |           |           | 20         | 21         | 41         |              |
| Morobe             | 45         | 36         | 81         | 2          | 2          | 4          | 5          | 3          | 8          |           |           |           |           | 52         | 41         | 93         |              |
| West New Britain   |            |            |            | 1          | 1          | 2          |            |            |            |           |           |           |           | 1          | 1          | 2          |              |
| East New Britain   | 96         | 69         | 165        |            | 3          | 3          | 12         | 16         | 28         | 11        | 11        |           |           | 119        | 88         | 207        |              |
| New Ireland        | 7          | 7          | 14         | 3          | 2          | 5          |            |            |            |           |           |           |           | 10         | 9          | 19         |              |
| Bougainville       | 2          | 5          | 7          | 2          | 3          | 5          | 8          | 3          | 11         |           |           |           | 13        | 12         | 24         | 36         |              |
| Manus              |            |            |            | 18         | 12         | 30         |            |            |            |           |           |           |           | 18         | 12         | 30         |              |
| <b>Total</b>       | <b>272</b> | <b>221</b> | <b>493</b> | <b>94</b>  | <b>74</b>  | <b>168</b> | <b>51</b>  | <b>37</b>  | <b>88</b>  | <b>11</b> | <b>11</b> | <b>13</b> | <b>13</b> | <b>428</b> | <b>345</b> | <b>773</b> |              |

(a) Primary\* schools follow Australian, dual or variable curricula.

(b) These schools follow PNG curriculum.

8. GOVERNMENT AND NON-GOVERNMENT PAPUA NEW GUINEAN PRIMARY PUPILS: AGE DISTRIBUTION (YEARS) IN ACADEMIC LEVEL BY DISTRICT AND SEX AT 30 JUNE 1972

| District                 | Sex    | Preparatory |      | Standard 1 |      | Standard 2 |      | Standard 3 |      | Standard 4 |      | Standard 5 |      | Standard 6 |      |
|--------------------------|--------|-------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|
|                          |        | Mean        | S.D. | Mean       | S.D. | Mean       | S.D. | Mean       | S.D. | Mean       | S.D. | Mean       | S.D. | Mean       | S.D. |
| Western .. ..            | Male   | 7.1         | 1.4  | 8.0        | 1.3  | 9.4        | 1.8  | 10.6       | 1.9  | 11.9       | 1.9  | 12.9       | 2.2  | 14.2       | 1.9  |
|                          | Female | 7.0         | 1.5  | 7.9        | 1.3  | 9.1        | 1.6  | 10.3       | 1.7  | 11.6       | 1.7  | 12.4       | 1.9  | 13.8       | 1.6  |
| Gulf .. ..               | Male   | ..          | ..   | 8.2        | 1.3  | 9.4        | 1.5  | 10.7       | 1.7  | 12.1       | 2.0  | 13.2       | 1.9  | 13.9       | 1.7  |
|                          | Female | ..          | ..   | 8.1        | 1.3  | 9.4        | 1.5  | 10.6       | 1.7  | 11.7       | 1.9  | 13.2       | 1.9  | 13.8       | 1.7  |
| Central .. ..            | Male   | 6.7         | 0.8  | 7.9        | 1.0  | 8.9        | 1.2  | 9.9        | 1.4  | 11.1       | 1.5  | 12.3       | 1.6  | 13.4       | 1.5  |
|                          | Female | 6.6         | 0.8  | 7.9        | 1.0  | 8.9        | 1.1  | 9.8        | 1.4  | 10.9       | 1.4  | 12.0       | 1.0  | 13.0       | 1.2  |
| Milne Bay .. ..          | Male   | 6.6         | 0.7  | 7.8        | 1.3  | 9.3        | 1.6  | 10.4       | 1.7  | 11.5       | 1.7  | 12.8       | 1.7  | 13.6       | 1.7  |
|                          | Female | 6.2         | 0.4  | 7.8        | 1.3  | 9.2        | 1.6  | 10.2       | 1.5  | 11.2       | 1.5  | 12.6       | 1.6  | 13.4       | 1.7  |
| Northern .. ..           | Male   | 6.5         | 1.1  | 8.1        | 1.2  | 9.3        | 1.7  | 10.6       | 1.9  | 11.8       | 2.2  | 13.2       | 2.0  | 14.0       | 1.8  |
|                          | Female | 6.4         | 1.1  | 8.0        | 1.2  | 9.1        | 1.5  | 10.3       | 1.8  | 11.2       | 1.9  | 12.7       | 1.7  | 13.8       | 1.6  |
| Southern Highlands .. .. | Male   | 7.0         | 0.1  | 7.8        | 1.3  | 8.8        | 1.4  | 10.1       | 1.8  | 10.9       | 1.9  | 12.3       | 1.9  | 12.9       | 1.6  |
|                          | Female | 6.9         | 0.2  | 7.7        | 1.2  | 8.6        | 1.3  | 9.9        | 1.6  | 10.7       | 1.6  | 11.9       | 1.5  | 12.6       | 1.4  |
| Eastern Highlands .. ..  | Male   | 6.9         | 0.5  | 8.0        | 1.1  | 9.0        | 1.4  | 9.9        | 1.7  | 11.3       | 1.9  | 12.1       | 1.6  | 13.3       | 1.9  |
|                          | Female | 6.8         | 0.5  | 7.8        | 1.1  | 8.9        | 1.3  | 9.6        | 1.3  | 10.9       | 1.4  | 11.8       | 1.4  | 13.0       | 1.4  |
| Chimbu .. ..             | Male   | 7.7         | 0.5  | 7.8        | 1.0  | 8.7        | 1.3  | 10.3       | 1.7  | 11.3       | 1.7  | 12.7       | 1.8  | 13.8       | 1.8  |
|                          | Female | 7.6         | 0.6  | 7.7        | 0.9  | 8.6        | 1.3  | 10.0       | 1.5  | 11.0       | 1.7  | 12.3       | 1.5  | 13.5       | 1.8  |
| Western Highlands .. ..  | Male   | 6.6         | 1.0  | 7.5        | 1.2  | 8.7        | 1.4  | 10.1       | 1.7  | 11.3       | 1.9  | 12.7       | 1.9  | 13.7       | 1.9  |
|                          | Female | 6.7         | 1.0  | 7.5        | 1.2  | 8.5        | 1.3  | 9.8        | 1.4  | 10.8       | 1.5  | 12.3       | 1.6  | 13.6       | 1.7  |
| West Sepik .. ..         | Male   | 8.4         | 1.2  | 8.8        | 1.6  | 10.3       | 2.2  | 10.8       | 2.0  | 11.8       | 1.9  | 13.2       | 2.1  | 14.3       | 1.9  |
|                          | Female | 8.5         | 1.2  | 8.9        | 1.5  | 9.9        | 1.7  | 10.5       | 1.6  | 11.5       | 1.5  | 12.7       | 1.4  | 13.9       | 1.7  |
| East Sepik .. ..         | Male   | 7.6         | 1.0  | 8.4        | 1.4  | 9.2        | 1.5  | 10.6       | 1.9  | 11.9       | 2.0  | 13.0       | 1.8  | 14.4       | 1.8  |
|                          | Female | 7.7         | 1.2  | 8.3        | 1.2  | 9.3        | 1.5  | 10.4       | 1.8  | 11.8       | 1.8  | 12.9       | 1.7  | 13.8       | 1.5  |
| Madang .. ..             | Male   | 7.2         | 0.5  | 8.0        | 1.2  | 9.4        | 2.0  | 10.2       | 1.7  | 11.4       | 1.8  | 12.9       | 2.0  | 13.8       | 2.0  |
|                          | Female | 7.2         | 0.6  | 7.9        | 1.1  | 9.1        | 1.6  | 9.9        | 1.5  | 11.3       | 1.6  | 12.5       | 1.8  | 13.6       | 1.8  |
| Morobe .. ..             | Male   | 7.0         | 0.6  | 8.3        | 1.5  | 9.4        | 1.8  | 10.5       | 1.9  | 11.9       | 2.0  | 12.7       | 1.9  | 13.7       | 1.8  |
|                          | Female | 6.8         | 0.7  | 8.0        | 1.1  | 9.1        | 1.5  | 10.1       | 1.5  | 11.2       | 1.7  | 12.4       | 1.6  | 13.7       | 1.9  |
| West New Britain .. ..   | Male   | 9.9         | 1.4  | 7.6        | 0.9  | 8.9        | 1.1  | 10.1       | 1.4  | 11.4       | 1.4  | 12.6       | 1.6  | 14.0       | 1.4  |
|                          | Female | 9.8         | 1.4  | 7.6        | 0.9  | 9.0        | 1.1  | 10.0       | 1.2  | 11.2       | 1.3  | 12.4       | 1.4  | 13.9       | 1.4  |
| East New Britain .. ..   | Male   | 6.9         | 1.0  | 8.1        | 0.6  | 8.9        | 0.9  | 9.8        | 1.1  | 10.9       | 1.2  | 12.2       | 1.3  | 13.3       | 1.5  |
|                          | Female | 6.8         | 0.9  | 8.1        | 0.6  | 8.9        | 0.9  | 9.7        | 1.1  | 10.8       | 1.2  | 12.0       | 1.1  | 12.9       | 1.4  |
| New Ireland .. ..        | Male   | 7.1         | 0.5  | 7.8        | 1.2  | 9.0        | 1.5  | 10.1       | 1.4  | 11.4       | 1.5  | 12.5       | 1.6  | 13.5       | 1.6  |
|                          | Female | 6.9         | 0.8  | 7.8        | 1.2  | 8.9        | 1.3  | 9.9        | 1.3  | 11.2       | 1.4  | 12.3       | 1.6  | 13.3       | 1.5  |
| Bougainville .. ..       | Male   | 7.8         | 0.8  | 8.1        | 1.2  | 9.5        | 1.7  | 10.5       | 1.6  | 11.4       | 1.7  | 12.5       | 1.6  | 13.6       | 1.7  |
|                          | Female | 7.9         | 0.8  | 7.9        | 1.0  | 9.2        | 1.5  | 10.4       | 1.6  | 11.3       | 1.6  | 12.4       | 1.6  | 13.4       | 1.6  |
| Manus .. ..              | Male   | 7.7         | 1.1  | 8.0        | 1.0  | 9.0        | 0.9  | 9.6        | 1.2  | 11.1       | 1.6  | 12.1       | 1.4  | 13.4       | 1.3  |
|                          | Female | 6.8         | 0.6  | 8.2        | 1.2  | 9.0        | 1.1  | 9.6        | 1.3  | 11.0       | 1.4  | 12.0       | 1.4  | 13.4       | 1.5  |
| Total .. ..              | Male   | 7.1         | 1.0  | 8.0        | 1.2  | 9.1        | 1.5  | 10.3       | 1.7  | 11.4       | 1.8  | 12.6       | 1.8  | 13.7       | 1.8  |
|                          | Female | 7.1         | 1.1  | 7.9        | 1.1  | 9.0        | 1.3  | 10.1       | 1.5  | 11.2       | 1.6  | 12.4       | 1.6  | 13.4       | 1.6  |

| District           | Sex    | Form 1 |      | Form 2 |      | Form 3 |      | Form 4 |      | Form 5 |      | Form 6 |      |
|--------------------|--------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|
|                    |        | Mean   | S.D. | Mean   | S.D. | Mean   | S.D. | Mean   | S.D. | Mean   | S.D. | Mean   | S.D. |
| Western            | Male   | 14.2   | 1.6  | 15.8   | 1.4  | 16.3   | 1.5  | 17.7   | 1.3  | ..     | ..   | ..     | ..   |
|                    | Female | 13.9   | 1.0  | 15.6   | 1.5  | 15.7   | 1.3  | 17.1   | 1.0  | ..     | ..   | ..     | ..   |
| Gulf               | Male   | 13.4   | 1.2  | 14.8   | 0.9  | 16.3   | 1.3  | 17.3   | 1.2  | ..     | ..   | ..     | ..   |
|                    | Female | 13.8   | 1.4  | 14.8   | 0.8  | 15.9   | 0.8  | 17.2   | 1.4  | ..     | ..   | ..     | ..   |
| Central            | Male   | 14.0   | 1.2  | 15.0   | 1.2  | 15.9   | 1.1  | 16.9   | 1.3  | 17.1   | 1.0  | 18.0   | 0.8  |
|                    | Female | 14.0   | 1.0  | 15.1   | 1.1  | 15.7   | 1.2  | 16.8   | 1.3  | 16.7   | 0.8  | 17.6   | 0.8  |
| Milne Bay          | Male   | 14.4   | 1.4  | 15.2   | 1.3  | 16.3   | 1.2  | 17.4   | 1.1  | ..     | ..   | ..     | ..   |
|                    | Female | 13.3   | 1.4  | 14.5   | 1.5  | 15.6   | 1.5  | 17.0   | 1.1  | ..     | ..   | ..     | ..   |
| Northern           | Male   | 14.4   | 1.5  | 15.2   | 1.3  | 16.2   | 1.5  | 17.6   | 1.3  | ..     | ..   | ..     | ..   |
|                    | Female | 13.8   | 1.2  | 14.7   | 0.8  | 15.4   | 1.3  | 17.1   | 1.5  | ..     | ..   | ..     | ..   |
| Southern Highlands | Male   | 13.2   | 1.2  | 14.7   | 1.5  | 17.1   | 2.0  | 19.7   | 1.3  | ..     | ..   | ..     | ..   |
|                    | Female | 13.4   | 0.9  | 14.9   | 1.0  | 15.4   | 0.8  | 17.2   | 1.8  | ..     | ..   | ..     | ..   |
| Eastern Highlands  | Male   | 14.4   | 1.8  | 15.1   | 1.6  | 16.3   | 1.8  | 17.5   | 1.5  | ..     | ..   | ..     | ..   |
|                    | Female | 14.0   | 1.4  | 15.1   | 1.3  | 16.2   | 1.4  | 17.3   | 1.1  | ..     | ..   | ..     | ..   |
| Chimbu             | Male   | 14.6   | 1.6  | 15.4   | 1.6  | 16.2   | 1.6  | 17.2   | 1.7  | ..     | ..   | ..     | ..   |
|                    | Female | 14.2   | 1.5  | 14.9   | 0.6  | 15.4   | 1.0  | 16.9   | 1.0  | ..     | ..   | ..     | ..   |
| Western Highlands  | Male   | 14.5   | 1.4  | 15.3   | 1.5  | 16.4   | 1.7  | 18.1   | 1.5  | ..     | ..   | ..     | ..   |
|                    | Female | 14.0   | 1.1  | 15.3   | 1.3  | 16.2   | 1.2  | 18.1   | 1.1  | ..     | ..   | ..     | ..   |
| West Sepik         | Male   | 14.1   | 1.4  | 15.3   | 1.7  | 15.8   | 1.6  | 17.4   | 2.0  | ..     | ..   | ..     | ..   |
|                    | Female | 14.1   | 1.7  | 15.0   | 1.1  | 16.6   | 1.1  | 17.4   | 1.2  | ..     | ..   | ..     | ..   |
| East Sepik         | Male   | 14.5   | 1.6  | 15.7   | 1.6  | 16.5   | 1.6  | 17.8   | 1.4  | ..     | ..   | ..     | ..   |
|                    | Female | 14.4   | 1.2  | 15.2   | 1.2  | 16.3   | 1.1  | 17.7   | 1.0  | ..     | ..   | ..     | ..   |
| Madang             | Male   | 14.5   | 1.5  | 15.5   | 1.6  | 16.7   | 1.7  | 17.7   | 1.6  | ..     | ..   | ..     | ..   |
|                    | Female | 14.3   | 1.1  | 15.2   | 1.3  | 16.5   | 1.4  | 17.1   | 0.9  | ..     | ..   | ..     | ..   |
| Morobe             | Male   | 14.0   | 1.2  | 15.3   | 1.6  | 16.5   | 1.7  | 17.6   | 1.5  | ..     | ..   | ..     | ..   |
|                    | Female | 13.7   | 1.2  | 14.9   | 1.2  | 16.0   | 1.0  | 17.1   | 1.3  | ..     | ..   | ..     | ..   |
| West New Britain   | Male   | 13.9   | 1.1  | 15.8   | 1.5  | ..     | ..   | ..     | ..   | ..     | ..   | ..     | ..   |
|                    | Female | 13.7   | 0.9  | ..     | ..   | ..     | ..   | ..     | ..   | ..     | ..   | ..     | ..   |
| East New Britain   | Male   | 13.8   | 1.2  | 15.1   | 1.4  | 16.3   | 1.4  | 17.5   | 1.2  | 16.6   | 0.9  | ..     | ..   |
|                    | Female | 14.0   | 1.3  | 15.3   | 1.3  | 16.4   | 1.3  | 17.2   | 1.1  | 16.9   | 0.7  | ..     | ..   |
| New Ireland        | Male   | 13.9   | 1.2  | 15.0   | 1.2  | 16.1   | 1.3  | 17.6   | 1.3  | ..     | ..   | ..     | ..   |
|                    | Female | 13.9   | 1.2  | 15.5   | 1.4  | 16.3   | 1.0  | 17.1   | 1.0  | ..     | ..   | ..     | ..   |
| Bougainville       | Male   | 14.2   | 1.4  | 15.8   | 1.4  | 16.9   | 1.6  | 18.0   | 1.5  | ..     | ..   | ..     | ..   |
|                    | Female | 14.2   | 1.4  | 15.9   | 1.4  | 17.0   | 1.5  | 17.8   | 1.7  | ..     | ..   | ..     | ..   |
| Manus              | Male   | 13.8   | 1.0  | 15.0   | 0.9  | 16.2   | 0.9  | 17.1   | 1.1  | ..     | ..   | ..     | ..   |
|                    | Female | 13.5   | 0.9  | 14.8   | 1.0  | 16.0   | 0.9  | 17.1   | 1.1  | ..     | ..   | ..     | ..   |
| Total              | Male   | 14.1   | 1.4  | 15.3   | 1.5  | 16.3   | 1.5  | 17.6   | 1.5  | 17.0   | 0.9  | 18.0   | 0.8  |
|                    | Female | 13.9   | 1.2  | 15.1   | 1.3  | 16.1   | 1.2  | 17.2   | 1.3  | 16.8   | 0.8  | 17.6   | 0.8  |

10. GOVERNMENT AND NON-GOVERNMENT PAPUA NEW GUINEAN PUPILS: SUMMARY OF AGE DISTRIBUTION (YEARS) IN ACADEMIC LEVEL AT 30 JUNE 1972

| Academic level | Sex     | 5-  | 6     | 7      | 8      | 9      | 10     | 11     | 12     | 13     | 14     | 15     | 16    | 17    | 18    | 19  | 20+ | Mean | S.D. |     |
|----------------|---------|-----|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-----|-----|------|------|-----|
| Preparatory .. | Male    | 102 | 743   | 1,178  | 515    | 152    | 49     | 34     | 16     | ..     | ..     | ..     | ..    | 1     | ..    | ..  | ..  | 7.1  | 1.0  |     |
|                | Female  | 61  | 562   | 733    | 328    | 116    | 44     | 18     | 9      | ..     | 1      | ..     | ..    | ..    | ..    | ..  | ..  | 7.1  | 1.1  |     |
| Standard 1 ..  | Male    | 227 | 2,021 | 7,988  | 9,810  | 3,932  | 1,521  | 716    | 393    | 142    | 67     | 27     | 12    | 4     | ..    | ..  | ..  | 8.0  | 1.2  |     |
|                | Female  | 143 | 1,071 | 4,501  | 5,957  | 2,265  | 824    | 317    | 143    | 35     | 26     | 9      | 2     | 1     | ..    | ..  | ..  | 8.0  | 1.2  |     |
| Standard 2 ..  | Male    | 1   | 380   | 2,375  | 7,957  | 7,275  | 3,979  | 2,094  | 1,245  | 499    | 273    | 97     | 53    | 30    | 15    | 7   | 1   | 7.9  | 1.1  |     |
|                | Female  | ..  | 220   | 1,325  | 4,514  | 4,545  | 2,326  | 1,133  | 697    | 213    | 85     | 19     | 11    | 10    | 5     | 2   | 6   | 9.1  | 1.5  |     |
| Standard 3 ..  | Male    | ..  | ..    | 498    | 2,650  | 6,646  | 6,528  | 4,042  | 2,849  | 1,315  | 732    | 324    | 153   | 47    | 22    | 6   | 18  | 9.0  | 1.3  |     |
|                | Female  | ..  | ..    | 261    | 1,560  | 3,964  | 3,987  | 2,302  | 1,411  | 515    | 268    | 89     | 34    | 18    | 3     | 2   | 5   | 10.3 | 1.7  |     |
| Standard 4 ..  | Male    | ..  | ..    | ..     | 524    | 2,143  | 5,401  | 5,572  | 4,390  | 2,515  | 1,528  | 752    | 381   | 179   | 95    | 22  | 38  | 11.4 | 1.8  |     |
|                | Female  | ..  | ..    | ..     | 235    | 1,367  | 3,124  | 3,216  | 2,409  | 1,246  | 675    | 238    | 101   | 34    | 9     | 2   | 2   | 11.2 | 1.6  |     |
| Standard 5 ..  | Male    | ..  | ..    | ..     | ..     | 252    | 1,342  | 3,771  | 4,809  | 3,632  | 2,598  | 1,307  | 749   | 327   | 166   | 76  | 81  | 12.6 | 1.8  |     |
|                | Female  | ..  | ..    | ..     | ..     | 143    | 898    | 2,246  | 2,892  | 2,124  | 1,313  | 605    | 262   | 72    | 24    | 10  | 10  | 12.4 | 1.6  |     |
| Standard 6 ..  | Male    | ..  | ..    | ..     | ..     | ..     | 226    | 1,114  | 3,249  | 3,942  | 3,725  | 2,230  | 1,449 | 591   | 319   | 118 | 106 | 13.7 | 1.8  |     |
|                | Female  | ..  | ..    | ..     | ..     | ..     | 113    | 732    | 1,754  | 2,170  | 1,892  | 1,072  | 548   | 162   | 73    | 25  | 25  | 13.4 | 1.6  |     |
| Form 1 ..      | Male    | ..  | ..    | ..     | ..     | ..     | ..     | 89     | 446    | 1,430  | 1,617  | 1,087  | 577   | 215   | 76    | 21  | 11  | 14.1 | 1.4  |     |
|                | Female  | ..  | ..    | ..     | ..     | ..     | ..     | 31     | 267    | 776    | 878    | 519    | 198   | 46    | 10    | 5   | 10  | 13.9 | 1.2  |     |
| Form 2 ..      | Male    | ..  | ..    | ..     | ..     | ..     | ..     | ..     | 73     | 420    | 1,148  | 1,498  | 1,039 | 594   | 280   | 84  | 34  | 15.3 | 1.5  |     |
|                | Female  | ..  | ..    | ..     | ..     | ..     | ..     | ..     | 29     | 186    | 497    | 727    | 491   | 200   | 68    | 7   | 19  | 15.1 | 1.3  |     |
| Form 3 ..      | Male    | ..  | ..    | ..     | ..     | ..     | ..     | ..     | ..     | 1      | 244    | 601    | 730   | 574   | 380   | 128 | 86  | 16.3 | 1.5  |     |
|                | Female  | ..  | ..    | ..     | ..     | ..     | ..     | ..     | ..     | ..     | 18     | 97     | 285   | 394   | 254   | 108 | 22  | 19   | 16.1 | 1.2 |
| Form 4 ..      | Male    | ..  | ..    | ..     | ..     | ..     | ..     | ..     | ..     | ..     | ..     | 19     | 132   | 346   | 559   | 530 | 268 | 215  | 17.6 | 1.5 |
|                | Female  | ..  | ..    | ..     | ..     | ..     | ..     | ..     | ..     | ..     | ..     | 13     | 49    | 182   | 243   | 178 | 62  | 33   | 17.2 | 1.3 |
| Form 5 ..      | Male    | ..  | ..    | ..     | ..     | ..     | ..     | ..     | ..     | ..     | ..     | 10     | 51    | 75    | 45    | 8   | 2   | 17.0 | 0.9  |     |
|                | Female  | ..  | ..    | ..     | ..     | ..     | ..     | ..     | ..     | ..     | ..     | ..     | 2     | 13    | 25    | 8   | ..  | ..   | 16.8 | 0.8 |
| Form 6 ..      | Male    | ..  | ..    | ..     | ..     | ..     | ..     | ..     | ..     | ..     | ..     | ..     | ..    | 4     | 20    | 50  | 7   | 18.0 | 0.8  |     |
|                | Female  | ..  | ..    | ..     | ..     | ..     | ..     | ..     | ..     | ..     | ..     | ..     | ..    | 2     | 9     | 16  | 1   | 17.6 | 0.8  |     |
| Total ..       | Persons | 534 | 4,997 | 18,859 | 34,050 | 32,800 | 30,362 | 27,427 | 27,082 | 21,199 | 17,695 | 11,679 | 7,782 | 4,290 | 2,483 | 897 | 751 | 10.9 | 6.4  |     |

II. GOVERNMENT AND NON-GOVERNMENT INSTITUTIONS: STAFF DISTRIBUTION OF OVERSEAS AND LOCAL OFFICERS BY DISTRICT AT 30 JUNE 1972  
 APPENDIX XXII  
 TOTAL TEACHING SERVICE STAFF

| District                   | Primary    |              | Secondary  |            | Technical  |           | Teacher education |           | Total Persons |              |
|----------------------------|------------|--------------|------------|------------|------------|-----------|-------------------|-----------|---------------|--------------|
|                            | Overseas   | Local        | Overseas   | Local      | Overseas   | Local     | Overseas          | Local     | Overseas      | Local        |
| Western .. .. .            | 30         | 208          | 31         | 8          | 4          | 4         | ..                | ..        | 65            | 220          |
| Gulf .. .. .               | 18         | 196          | 12         | 2          | 4          | 3         | ..                | ..        | 34            | 201          |
| Central .. .. .            | 200        | 615          | 174        | 24         | 79         | 20        | 39                | 12        | 492           | 671          |
| Milne Bay .. .. .          | 34         | 407          | 49         | 16         | 2          | 3         | ..                | ..        | 85            | 426          |
| Northern .. .. .           | 19         | 306          | 30         | 6          | 5          | 4         | ..                | ..        | 54            | 216          |
| Southern Highlands .. .. . | 61         | 279          | 21         | 3          | 3          | 1         | 8                 | 1         | 93            | 284          |
| Eastern Highlands .. .. .  | 64         | 267          | 48         | 4          | 24         | 6         | 37                | 2         | 173           | 279          |
| Chimbu .. .. .             | 28         | 314          | 28         | 9          | 1          | 1         | ..                | ..        | 57            | 324          |
| Western Highlands .. .. .  | 96         | 457          | 52         | 4          | 8          | 2         | 16                | 2         | 172           | 465          |
| West Sepik .. .. .         | 60         | 198          | 17         | 2          | 7          | 6         | ..                | ..        | 84            | 206          |
| East Sepik .. .. .         | 81         | 389          | 51         | 14         | 4          | 5         | 7                 | ..        | 143           | 408          |
| Madang .. .. .             | 86         | 494          | 70         | 14         | 30         | 5         | 24                | 3         | 210           | 516          |
| Morobe .. .. .             | 80         | 537          | 80         | 12         | 52         | 7         | 17                | 2         | 229           | 558          |
| West New Britain .. .. .   | 16         | 299          | 8          | 3          | 1          | 2         | ..                | ..        | 25            | 304          |
| East New Britain .. .. .   | 63         | 592          | 122        | 23         | 49         | 13        | 36                | 7         | 270           | 635          |
| New Ireland .. .. .        | 16         | 309          | 36         | 12         | 2          | ..        | ..                | ..        | 54            | 321          |
| Bougainville .. .. .       | 36         | 473          | 51         | 11         | 14         | 11        | ..                | ..        | 101           | 495          |
| Manus .. .. .              | 10         | 143          | 20         | 12         | 3          | 4         | ..                | ..        | 33            | 159          |
| <b>Total .. .. .</b>       | <b>998</b> | <b>6,383</b> | <b>900</b> | <b>179</b> | <b>292</b> | <b>97</b> | <b>184</b>        | <b>29</b> | <b>2,374</b>  | <b>6,688</b> |

12. GOVERNMENT AND NON-GOVERNMENT PNG CURRICULUM PRIMARY PUPILS: PROGRESSIVES, REPEATERS AND NEW ENTRIES INTO THE NATIONAL EDUCATION SYSTEM, BY  
DIVISION AT 30 JUNE 1972

## (i) Government

| District           | Sex    | Preparatory |           | Standard 1 |               |           | Standard 2 |               |           | Standard 3 |               |           | Standard 4 |               |           | Standard 5 |               |           | Standard 6 |               |           |
|--------------------|--------|-------------|-----------|------------|---------------|-----------|------------|---------------|-----------|------------|---------------|-----------|------------|---------------|-----------|------------|---------------|-----------|------------|---------------|-----------|
|                    |        | New         | Re-peater | New        | Pro-gres-sive | Re-peater | New        | Pro-gres-sive | Re-peater | New        | Pro-gres-sive | Re-peater | New        | Pro-gres-sive | Re-peater | New        | Pro-gres-sive | Re-peater | New        | Pro-gres-sive | Re-peater |
| Western            | Male   | 47          | ..        | 204        | 41            | 6         | ..         | 317           | 5         | ..         | 346           | 9         | ..         | 318           | 1         | ..         | 335           | 1         | ..         | 316           | 2         |
|                    | Female | 31          | ..        | 118        | 30            | 6         | ..         | 210           | 2         | ..         | 210           | 3         | ..         | 311           | 1         | ..         | 203           | ..        | ..         | 144           | 1         |
| Gulf               | Male   | ..          | ..        | 284        | 2             | 5         | ..         | 258           | ..        | ..         | 334           | 9         | ..         | 233           | 7         | ..         | 228           | 8         | ..         | 203           | 15        |
|                    | Female | ..          | 1         | 183        | ..            | 8         | 1          | 149           | ..        | ..         | 232           | 4         | ..         | 202           | 3         | ..         | 154           | ..        | ..         | 133           | 5         |
| Central            | Male   | 302         | ..        | 393        | 468           | 13        | ..         | 977           | 21        | ..         | 1,057         | 31        | 1          | 1,066         | 20        | ..         | 830           | 30        | ..         | 912           | 35        |
|                    | Female | 262         | ..        | 319        | 349           | 8         | 2          | 793           | 14        | 2          | 769           | 23        | 1          | 739           | 9         | 1          | 627           | 18        | ..         | 616           | 13        |
| Milne Bay          | Male   | ..          | ..        | 311        | 114           | 19        | 1          | 396           | 1         | 1          | 299           | ..        | ..         | 291           | ..        | ..         | 291           | ..        | ..         | 197           | 5         |
|                    | Female | ..          | ..        | 212        | 92            | 12        | 2          | 289           | 1         | 3          | 181           | 2         | ..         | 383           | 1         | ..         | 185           | 13        | 1          | 262           | 9         |
| Northern           | Male   | 47          | ..        | 127        | 60            | 9         | 4          | 289           | 19        | ..         | 224           | 11        | ..         | 291           | ..        | ..         | 136           | 2         | ..         | 197           | 5         |
|                    | Female | 44          | ..        | 86         | 53            | 9         | 1          | 202           | 11        | ..         | 153           | 5         | ..         | 346           | 10        | ..         | 239           | 12        | ..         | 188           | 21        |
| Southern Highlands | Male   | 24          | ..        | 949        | 115           | 7         | ..         | 829           | 2         | ..         | 696           | 2         | ..         | 200           | 2         | ..         | 144           | 9         | ..         | 113           | 13        |
|                    | Female | 14          | ..        | 209        | 28            | ..        | 2          | 205           | 2         | ..         | 175           | ..        | ..         | 706           | 4         | ..         | 285           | 2         | ..         | 281           | ..        |
| Eastern Highlands  | Male   | 73          | ..        | 1,090      | 170           | 13        | ..         | 851           | 16        | ..         | 852           | 17        | ..         | 165           | ..        | ..         | 105           | ..        | ..         | 102           | ..        |
|                    | Female | 43          | ..        | 421        | 57            | 6         | ..         | 301           | 6         | ..         | 264           | 4         | ..         | 855           | 27        | ..         | 641           | 24        | ..         | 545           | 10        |
| Chimbu             | Male   | 46          | ..        | 787        | 149           | 6         | 3          | 899           | ..        | ..         | 535           | ..        | ..         | 262           | 7         | ..         | 158           | 4         | ..         | 150           | 2         |
|                    | Female | 26          | ..        | 332        | 58            | 2         | 1          | 297           | ..        | ..         | 157           | ..        | ..         | 689           | 2         | ..         | 443           | 1         | ..         | 421           | 11        |
| Western Highlands  | Male   | 175         | ..        | 1,089      | 254           | 38        | ..         | 1,057         | 19        | ..         | 814           | 9         | ..         | 200           | 1         | ..         | 117           | 1         | ..         | 107           | 5         |
|                    | Female | 81          | ..        | 242        | 85            | 6         | ..         | 278           | 5         | ..         | 199           | 1         | ..         | 719           | 1         | ..         | 446           | 6         | ..         | 541           | 1         |
| West Sepik         | Male   | ..          | ..        | 240        | ..            | 15        | ..         | 339           | 12        | 2          | 210           | 3         | 1          | 189           | 3         | ..         | 98            | 1         | ..         | 96            | ..        |
|                    | Female | ..          | ..        | 89         | ..            | 8         | 1          | 119           | 3         | 4          | 81            | 1         | 1          | 251           | 5         | 2          | 158           | ..        | ..         | 168           | 6         |
| East Sepik         | Male   | 48          | ..        | 618        | 233           | 4         | ..         | 893           | 9         | ..         | 672           | 13        | ..         | 86            | ..        | ..         | 67            | ..        | ..         | 79            | 1         |
|                    | Female | 39          | ..        | 306        | 123           | 4         | ..         | 374           | ..        | ..         | 279           | 5         | ..         | 601           | 8         | ..         | 503           | ..        | ..         | 497           | 7         |
| Madang             | Male   | 47          | ..        | 169        | 178           | ..        | ..         | 539           | 3         | ..         | 451           | 3         | ..         | 221           | 1         | ..         | 193           | 2         | ..         | 177           | 1         |
|                    | Female | 38          | ..        | 118        | 106           | ..        | ..         | 339           | ..        | ..         | 255           | 1         | ..         | 549           | ..        | ..         | 402           | ..        | ..         | 542           | 2         |
| Morobe             | Male   | 188         | ..        | 821        | 164           | 42        | 1          | 849           | 5         | ..         | 840           | 8         | ..         | 313           | ..        | ..         | 210           | ..        | ..         | 242           | ..        |
|                    | Female | 126         | ..        | 404        | 107           | 20        | 5          | 436           | 7         | ..         | 423           | 8         | ..         | 861           | 6         | ..         | 439           | 1         | ..         | 556           | 29        |
| West New Britain   | Male   | ..          | ..        | 177        | 11            | 22        | ..         | 194           | 26        | ..         | 201           | 13        | ..         | 435           | 1         | ..         | 256           | ..        | ..         | 210           | 11        |
|                    | Female | ..          | ..        | 89         | 10            | 19        | ..         | 147           | 20        | ..         | 134           | 10        | ..         | 161           | 17        | ..         | 117           | 6         | ..         | 138           | 1         |
| East New Britain   | Male   | 50          | ..        | 499        | 56            | 1         | ..         | 395           | 1         | ..         | 607           | ..        | ..         | 106           | 7         | 1          | 75            | 6         | ..         | 74            | ..        |
|                    | Female | 34          | 1         | 431        | 39            | 1         | ..         | 310           | ..        | ..         | 697           | ..        | ..         | 745           | ..        | ..         | 747           | 1         | ..         | 533           | 2         |
| New Ireland        | Male   | 22          | ..        | 89         | 49            | 7         | ..         | 241           | 1         | ..         | 607           | 1         | ..         | 572           | 2         | ..         | 594           | 1         | ..         | 401           | ..        |
|                    | Female | 14          | ..        | 94         | 46            | 5         | 1          | 208           | ..        | ..         | 207           | 1         | ..         | 243           | 3         | ..         | 185           | 3         | ..         | 237           | 11        |
| Bougainville       | Male   | ..          | ..        | 135        | ..            | ..        | 1          | 184           | 2         | ..         | 168           | 1         | ..         | 211           | 3         | ..         | 145           | 1         | ..         | 161           | 10        |
|                    | Female | ..          | ..        | 101        | ..            | ..        | ..         | 159           | 1         | ..         | 120           | ..        | ..         | 157           | 2         | ..         | 147           | ..        | ..         | 98            | 6         |
| Manus              | Male   | 21          | ..        | 86         | 19            | ..        | ..         | 172           | 3         | ..         | 94            | ..        | ..         | 126           | ..        | ..         | 141           | ..        | ..         | 74            | 2         |
|                    | Female | 10          | ..        | 63         | 20            | ..        | ..         | 136           | 1         | ..         | 83            | ..        | ..         | 140           | ..        | ..         | 179           | 3         | ..         | 166           | 5         |
| Total              | Male   | 1,090       | 1         | 8,068      | 2,083         | 207       | 10         | 9,679         | 145       | 3          | 8,638         | 133       | 2          | 9,101         | 114       | 2          | 6,509         | 111       | 1          | 6,604         | 173       |
|                    | Female | 762         | 1         | 3,817      | 1,203         | 114       | 16         | 4,952         | 73        | 9          | 4,441         | 73        | 3          | 4,679         | 40        | 2          | 3,554         | 46        | ..         | 3,212         | 69        |

| District           | Sex    | Preparatory |           | Standard 1 |               |           | Standard 2 |               |           | Standard 3 |               |           | Standard 4 |               |           | Standard 5 |               |           | Standard 6 |               |           |
|--------------------|--------|-------------|-----------|------------|---------------|-----------|------------|---------------|-----------|------------|---------------|-----------|------------|---------------|-----------|------------|---------------|-----------|------------|---------------|-----------|
|                    |        | New         | Re-peater | New        | Pro-gres-sive | Re-peater | New        | Pro-gres-sive | Re-peater | New        | Pro-gres-sive | Re-peater | New        | Pro-gres-sive | Re-peater | New        | Pro-gres-sive | Re-peater | New        | Pro-gres-sive | Re-peater |
| Western            | Male   | 21          | ..        | 474        | 45            | 21        | ..         | 613           | 21        | ..         | 618           | 10        | ..         | 493           | 2         | ..         | 312           | 5         | ..         | 269           | ..        |
|                    | Female | 15          | ..        | 319        | 33            | 15        | ..         | 356           | 3         | ..         | 388           | 6         | ..         | 354           | ..        | ..         | 152           | 2         | ..         | 128           | ..        |
| Gulf               | Male   | ..          | ..        | 456        | 16            | 22        | ..         | 372           | 13        | 3          | 458           | 3         | 2          | 409           | ..        | 1          | 294           | 6         | ..         | 248           | 1         |
|                    | Female | ..          | ..        | 280        | 6             | 18        | ..         | 274           | 6         | ..         | 345           | 6         | 1          | 238           | 2         | ..         | 152           | 4         | ..         | 145           | ..        |
| Central            | Male   | 139         | 1         | 711        | 412           | 44        | 3          | 1,067         | 31        | 1          | 945           | 31        | 2          | 1,019         | 28        | 1          | 819           | 19        | ..         | 728           | 16        |
|                    | Female | 107         | ..        | 556        | 341           | 16        | 1          | 847           | 22        | 1          | 611           | 15        | 3          | 676           | 17        | ..         | 496           | 2         | ..         | 371           | 3         |
| Milne Bay          | Male   | ..          | ..        | 672        | 143           | 102       | 10         | 1,037         | 29        | 1          | 906           | 26        | ..         | 871           | 26        | ..         | 585           | 23        | 1          | 453           | 26        |
|                    | Female | ..          | ..        | 479        | 116           | 50        | 13         | 805           | 21        | 5          | 562           | 11        | 1          | 574           | 20        | 1          | 426           | 17        | ..         | 352           | 11        |
| Northern           | Male   | ..          | ..        | 246        | 78            | 39        | 15         | 424           | 19        | 6          | 725           | 22        | 1          | 412           | 22        | 2          | 594           | 31        | ..         | 336           | 12        |
|                    | Female | ..          | ..        | 217        | 31            | 16        | 7          | 350           | 16        | 11         | 382           | 27        | ..         | 249           | 6         | 1          | 357           | 22        | ..         | 197           | 9         |
| Southern Highlands | Male   | ..          | ..        | 518        | 607           | ..        | 1          | 979           | 1         | ..         | 902           | 9         | ..         | 550           | ..        | ..         | 412           | ..        | ..         | 338           | 3         |
|                    | Female | ..          | ..        | 218        | 227           | 1         | ..         | 378           | ..        | ..         | 338           | 7         | ..         | 208           | ..        | ..         | 162           | ..        | ..         | 106           | ..        |
| Eastern Highlands  | Male   | 72          | 4         | 517        | 313           | 51        | 2          | 782           | 15        | 1          | 748           | 16        | ..         | 614           | 22        | ..         | 364           | 15        | ..         | 413           | 4         |
|                    | Female | 30          | 2         | 181        | 85            | 12        | 2          | 203           | 10        | 1          | 192           | 1         | ..         | 130           | 4         | ..         | 103           | 4         | ..         | 83            | ..        |
| Chimbu             | Male   | ..          | ..        | 853        | 129           | 57        | ..         | 723           | 39        | 11         | 1,045         | 46        | ..         | 837           | 33        | ..         | 691           | 7         | ..         | 471           | 8         |
|                    | Female | ..          | ..        | 315        | 68            | 30        | ..         | 270           | 14        | ..         | 274           | 10        | ..         | 220           | 6         | ..         | 128           | 8         | ..         | 128           | 4         |
| Western Highlands  | Male   | 485         | 4         | 1,083      | 670           | 21        | 7          | 1,635         | 31        | 4          | 1,583         | 23        | 2          | 1,443         | 10        | 3          | 1,219         | 17        | ..         | 963           | 18        |
|                    | Female | 219         | 4         | 406        | 232           | 9         | 3          | 453           | 6         | 1          | 401           | 5         | 1          | 351           | 3         | 2          | 274           | 2         | 1          | 201           | 3         |
| West Sepik         | Male   | 283         | 43        | 202        | 371           | 21        | 24         | 589           | 5         | 9          | 539           | 5         | 6          | 577           | 5         | 2          | 547           | 1         | 2          | 382           | 1         |
|                    | Female | 195         | 27        | 81         | 284           | 3         | 7          | 363           | 6         | 1          | 300           | ..        | 2          | 358           | 4         | ..         | 257           | 5         | ..         | 183           | ..        |
| East Sepik         | Male   | 55          | ..        | 899        | 301           | 30        | 2          | 1,211         | 24        | ..         | 1,442         | 26        | 3          | 1,134         | 9         | 1          | 1,077         | 17        | 1          | 965           | 15        |
|                    | Female | 59          | ..        | 553        | 181           | 19        | ..         | 694           | 17        | ..         | 726           | 8         | ..         | 540           | 5         | ..         | 527           | 8         | ..         | 353           | 1         |
| Madang             | Male   | 75          | ..        | 433        | 568           | 27        | 1          | 1,409         | 4         | 1          | 1,243         | 4         | ..         | 1,219         | 1         | ..         | 1,060         | 8         | 1          | 753           | 14        |
|                    | Female | 45          | ..        | 273        | 451           | 9         | ..         | 832           | 2         | 1          | 800           | 1         | ..         | 686           | 3         | ..         | 614           | ..        | ..         | 417           | 2         |
| Morobe             | Male   | 80          | 7         | 1,060      | 487           | 51        | 6          | 1,287         | 52        | 1          | 1,059         | 26        | ..         | 1,002         | 8         | ..         | 742           | 15        | ..         | 730           | 31        |
|                    | Female | 51          | 5         | 493        | 289           | 26        | 2          | 749           | 14        | 1          | 651           | 2         | ..         | 486           | 4         | ..         | 331           | 1         | ..         | 283           | 5         |
| West New Britain   | Male   | 10          | 8         | 433        | 101           | 52        | ..         | 571           | 13        | ..         | 731           | 23        | ..         | 621           | 24        | ..         | 625           | 14        | ..         | 478           | 5         |
|                    | Female | 6           | 11        | 370        | 95            | 40        | ..         | 460           | 11        | ..         | 639           | 18        | ..         | 466           | 10        | 1          | 555           | 7         | ..         | 357           | 1         |
| East New Britain   | Male   | 40          | ..        | 573        | 291           | 7         | ..         | 818           | 4         | ..         | 1,097         | 6         | ..         | 906           | 1         | ..         | 879           | 1         | ..         | 760           | 3         |
|                    | Female | 39          | ..        | 472        | 200           | 15        | ..         | 701           | 2         | ..         | 891           | 1         | ..         | 699           | ..        | ..         | 720           | ..        | ..         | 625           | ..        |
| New Ireland        | Male   | 4           | 4         | 302        | 306           | 23        | ..         | 520           | 11        | ..         | 786           | 13        | 1          | 526           | 9         | ..         | 453           | 1         | ..         | 428           | 15        |
|                    | Female | 3           | 1         | 299        | 276           | 24        | ..         | 463           | 17        | 1          | 654           | 9         | ..         | 459           | 6         | 1          | 443           | ..        | ..         | 365           | 11        |
| Bougainville       | Male   | 43          | ..        | 775        | 198           | 11        | 11         | 1,413         | 28        | ..         | 1,248         | 20        | ..         | 880           | 17        | ..         | 1,094         | 14        | ..         | 847           | 24        |
|                    | Female | 36          | ..        | 707        | 190           | 15        | 18         | 1,220         | 20        | ..         | 1,105         | 11        | ..         | 713           | 9         | ..         | 876           | 9         | ..         | 635           | 23        |
| Manus              | Male   | ..          | ..        | 126        | 78            | 2         | ..         | 184           | ..        | ..         | 217           | 4         | ..         | 217           | 8         | ..         | 195           | 12        | 3          | 196           | 15        |
|                    | Female | ..          | ..        | 113        | 43            | ..        | ..         | 125           | 2         | ..         | 205           | ..        | 2          | 186           | 5         | ..         | 139           | 4         | 4          | 131           | 9         |
| Total              | Male   | 1,307       | 71        | 10,333     | 5,114         | 581       | 82         | 15,634        | 340       | 38         | 16,292        | 313       | 17         | 13,730        | 225       | 10         | 11,962        | 206       | 8          | 9,758         | 211       |
|                    | Female | 805         | 50        | 6,332      | 3,148         | 318       | 53         | 9,543         | 189       | 23         | 9,464         | 138       | 10         | 7,593         | 104       | 8          | 6,712         | 94        | 6          | 5,060         | 82        |

## APPENDIX XXIII—continued

## (A) GENERAL AND MULTILATERAL INTERNATIONAL AGREEMENTS—continued

| Description and date of signature  | Applying from—    |
|--|-------------------|
| International Agreement for Dispensing with Bills of Health and Consular Visas on Bills of Health (22 December 1934)   | 21 July 1936      |
| Convention Concerning the Employment of Women on Underground Work in Mines of all Kinds (21 June 1935)   | 14 December 1954  |
| International Convention concerning the Use of Broadcasting in the Cause of Peace (23 September 1936)  | 2 April 1938      |
| Procès Verbal regarding the application of certain Articles of Convention of October, 1933, for facilitating the International Circulation of Films of an Educational Character (12 September 1938)                                | 12 February 1940  |
| Convention Modifying the International Sanitary Convention of 21 June 1926 (31 October 1938)   | 28 September 1939 |
| Universal Postal Convention (23 May 1939)  | 1 July 1940       |
| Convention on International Civil Aviation (7 December 1944)   | 4 April 1947      |
| International Air Services Transit Agreement (7 December 1944)   | 28 August 1945    |
| Charter of the United Nations (26 June 1945)   | 1 November 1945   |
| Statute of the International Court of Justice (26 June 1945)   | 1 November 1945   |
| Articles of Agreement of the International Monetary Fund (27 December 1945)  | 5 August 1947     |
| Articles of Agreement of the International Bank for Reconstruction and Development (27 December 1945)  | 5 August 1947     |
| Agreement on Reparation from Germany, on the Establishment of an inter-Allied Reparation Agency and on the Restitution of Monetary Gold (14 January 1946)  | 25 February 1946  |
| International Labour Organization Final Articles Revision Convention (9 October 1946)  | 15 January 1952   |
| Protocol amending the Agreements, Conventions and Protocols on Narcotic Drugs of 23 January 1912, 11 February 1925, 19 February 1925, 13 July 1931, 27 November 1931 and 26 June 1936 (11 December 1946)                           | 28 August 1947    |
| Trusteeship Agreement for the Territory of New Guinea (13 December 1946)   | 13 December 1946  |
| Agreement establishing the South Pacific Commission (6 February 1947)  | 29 July 1948      |
| Universal Postal Convention (5 July 1947)  | 13 October 1950   |
| Labour Inspectorates (Non-Metropolitan Territories) Convention (11 July 1947)  | 30 September 1955 |
| International Telecommunication Convention (2 October 1947)  | 7 January 1949    |
| Convention on the World Meteorological Organization (11 October 1947)  | 26 October 1950   |
| Protocol amending the Convention of 30 September 1921, for the Suppression of the Traffic in Women and Children, and the Convention of 11 October 1933, for the Suppression of the Traffic in Women of Full Age (12 November 1947) | 13 November 1947  |
| Protocol amending the Convention of 12 September 1923, for the Suppression of the Circulation of and Traffic in Obscene Publications (12 November 1947)  | 13 November 1947  |
| Convention on the Privileges and Immunities of the Specialized Agencies (21 December 1947)   | 20 November 1962  |
| Protocol bringing under international control drugs outside the scope of the Convention of 13 July 1931, as amended by the Protocol of 11 December 1946 (19 November 1948)   | 1 December 1949   |
| Convention on the Prevention and Punishment of the Crime of Genocide (9 December 1948)   | 12 January 1951   |
| International Wheat Agreement (23 March 1949)  | 1 July 1949       |
| Protocol amending the International Agreement for the Suppression of White Slave Traffic of 18 May, 1904, and the International Convention for the Suppression of the White Slave Traffic of 4 May, 1910 (4 May 1949)              | 8 December 1949   |
| Agreement to revise the Commonwealth-United States Telecommunications Agreements of 4 December, 1945 (12 August 1949)  | 24 February 1950  |
| Convention relative to the Protection of Civilian Persons in time of War (12 August 1949)  | 14 April 1959     |
| Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (12 August 1949)   | 14 April 1959     |
| Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of the Armed Forces at Sea (12 August 1949)  | 14 April 1959     |
| Convention relative to the treatment of Prisoners of War (12 August 1949)  | 14 April 1959     |
| Convention on Road Traffic (19 September 1949)   | 2 June 1961       |
| Convention relating to the Status of Refugees (28 July 1951)   | 22 April 1954     |
| Security Treaty between Australia, New Zealand, United States of America (1 September 1951)  | 29 April 1952     |
| Agreement extending the Scope of the South Pacific Commission (7 November 1951)  | 7 November 1951   |
| International Plant Protection Convention (6 December 1951)  | 8 September 1954  |
| Universal Postal Convention and final Protocol thereto and Regulations, together with provisions regarding air correspondence, and final Protocol thereto (11 July 1952)   | 3 May 1954        |
| Supplementary Agreement revising the provisions of Article 2 of the Commonwealth-United States Telecommunications Agreement of 12 August 1949 (1 October 1952)   | 1 October 1952    |
| Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface (7 October 1952)   | 8 February 1959   |
| International Convention to facilitate the Importation of Commercial Samples and Advertising Material (7 November 1952)  | 11 February 1956  |
| International Telecommunication Convention (22 December 1952)  | 22 March 1954     |
| International Wheat Agreement (13 April 1953)  | 31 October 1953   |



## (A) GENERAL AND MULTILATERAL INTERNATIONAL AGREEMENTS—continued

| Description and date of signature   | Applying as from—  |
|---|--|
| Protocol for Limiting and Regulating Cultivation of the Poppy Plant, the Production of, International and Wholesale Trade in, and Use of Opium (23 June 1953)   | 8 March 1963   |
| Protocol amending the Slavery Convention of 25 September 1926 (7 December 1953) .. .. .   | 9 December 1953  |
| Agreement concerning the Frequency of Sessions of the South Pacific Commission (5 April 1954) ..  | 1 July 1954  |
| Protocol relating to Amendments to Articles 48(a), 49(e) and 61 of the Convention of 7 December 1944 on International Civil Aviation (14 June 1954)   | 12 December 1956   |
| Protocol Amending Article 45 of the International Civil Aviation Convention of 7 December 1944 (14 June 1954)   | 16 May 1958  |
| South-East Asia Collective Defence Treaty and Protocol (8 September 1954) .. .. .   | 19 February 1955   |
| State Treaty for the Re-establishment of an Independent and Democratic Austria (15 May 1955) ..   | 10 August 1961   |
| Protocol to Amend the Convention for the Unification of Certain Rules relating to International Carriage by Air, signed at Warsaw on 12 October 1929 (28 September 1955)  | 1 August 1963  |
| Plant Protection Agreement for South East Asia and Pacific Region (26 November 1955) .. .. .  | 2 July 1956  |
| International Wheat Agreement (25 April 1956) .. .. .   | 27 November 1956   |
| Convention on the Taxation of Road Vehicles for Private Use in International Traffic (18 May 1956)  | 1 August 1961  |
| Supplementary Convention on the Abolition of Slavery, the Slave Trade and Institutions and Practices similar to Slavery (7 September 1956)  | 6 January 1958   |
| Convention on the Nationality of Married Women (20 February 1957) .. .. .   | 12 June 1961   |
| Convention concerning the Abolition of Forced Labour (25 June 1957) .. .. .   | 5 October 1961   |
| Universal Postal Convention, Final Protocol thereto, Detailed Regulations for implementing the Convention, Provisions concerning Airmail and Final Protocol to the Provisions concerning Airmail (3 October 1957)   | 29 April 1959  |
| Optional Protocol of Signature concerning the Compulsory Settlement of Disputes arising out of the Geneva Law of the Sea Conventions (29 April 1958)  | 14 May 1963  |
| Convention on the High Seas (29 April 1958) .. .. .   | 13 June 1963   |
| Convention on the Continental Shelf (29 April 1958) .. .. .   | 10 June 1964   |
| Convention on the Territorial Sea and the Contiguous Zone (29 April 1958) .. .. .   | 10 September 1964  |
| International Telecommunication Convention, together with Final Protocol and Additional Protocols (21 December 1959)  | 1 February 1962  |
| Articles of Agreement of the International Development Association (26 January 1960) .. .. .  | 24 September 1960  |
| International Regulations for preventing Collisions at Sea, 1960 (17 June 1960) .. .. .   | 13 January 1967  |
| Convention Against Discrimination in Education (14 December 1960) .. .. .   | 1 March 1967   |
| Single Convention on Narcotic Drugs 1954 (30 March 1961) .. .. .  | 31 December 1967   |
| Vienna Convention on Diplomatic Relations, and Optional Protocol on Compulsory Settlement of Disputes (18 April 1961) .. .. .   | 25 February 1968   |
| Protocol amending Article 50 (a) of the International Civil Aviation Convention of 7 December 1944 (21 June 1961)   | 17 July 1962   |
| International Wheat Agreement (10 March 1962) .. .. .   | 16 July 1962   |
| International Coffee Agreement (28 September 1962) .. .. .  | 27 December 1963   |
| Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Underwater (5 August 1963)   | 12 November 1963   |
| Resolution for the Amendment of the Charter of the United Nations (17 December 1963) ..   | 31 August 1965   |
| Constitution of the Universal Postal Union and Final Protocol; General Regulations of the Universal Postal Union and Final Protocol; Universal Postal Convention and Final Protocol; Detailed Regulations for Implementing the Universal Postal Convention; Agreement concerning Postal Parcels and Final Protocol, and Detailed Regulations concerning Postal Parcels (10 July 1964) | 1 January 1966   |
| Agreement amending the Agreement establishing the South Pacific Commission (6 October 1964)   | 15 July 1965   |
| Protocol for the Extension of the International Wheat Agreement, 1962 (22 March 1965) .. .. .   | 16 July 1965   |
| Asian-Oceanic Postal Convention (16 December 1965) .. .. .  | 2 May 1969   |
| Amendment to Article 109 of the United Nations Charter (20 December 1965) .. .. .   | 12 June 1968   |
| Protocol for the Further Extension of the International Wheat Agreement, 1962 (4 April 1966)  | 16 July 1966 (Parts I, III, to VII);<br>1 August 1966<br>(Part II) |
| Treaty on the Principles Governing the Activities of States in the Exploration and Use of Outer Space including the Moon and other Celestial Bodies (27 January 1967) .. .. .   | 10 October 1967  |
| Protocol for the Further Extension of the International Wheat Agreement, 1962 (15 May 1967) ..  | 16 July 1967   |
| International Coffee Agreement (18 March 1968) .. .. .  | 1 October 1968   |
| International Sugar Agreement (3–24 December 1968) .. .. .  | 1 January 1969   |
| Amendment to Plant Protection Agreement for South East Asia and Pacific Region .. .. .  | 17 July 1969   |
| International Wheat Agreement 1971 .. .. .  | 1 July 1972  |
| Convention Concerning Employment Policy No. 122 .. .. .   | 12 November 1969   |

## APPENDIX XXIII—continued

## (A) GENERAL AND MULTILATERAL INTERNATIONAL AGREEMENTS—continued

| Description and date of signature  | Applying as from— |
|--|-------------------|
| Universal Postal Union; Additional Final Protocol to the Constitution of the Universal Postal Union; General Regulations of the Universal Postal Union and Final Protocol; Universal Postal Convention and Final Protocol and Detailed Regulations for Implementing the Convention; Agreement concerning Postal Parcels on a Final Protocol, and Detailed Regulations of the Agreement concerning Postal Parcels | 1 July 1972       |
| Asian Oceanic Postal Convention .. .. .  | 1 July 1972       |

## (B) BILATERAL TREATIES: EXCLUDING EXTRADITION TREATIES

| Country or Organisation     | Description and date of signature   | Applying as from—               |
|-----------------------------|---|---------------------------------|
| Austria .. ..               | Agreement Relating to Air Services (22 March 1967) .. ..  | 22 March 1967                   |
| Austria .. ..               | Convention regarding Legal Proceedings in Civil and Commercial Matters (31 March 1931)  | 10 November 1933                |
| Austria .. ..               | Exchange of Notes reviving 1931 Convention on Legal Proceedings (17 November 1951)  | 17 November 1951                |
| Belgium .. ..               | Convention—Legal Proceedings in Civil and Commercial Matters (21 June 1922)   | 10 October 1928                 |
| Belgium .. ..               | Convention Supplementary to the Convention of 1922 (4 November 1932)  | 6 July 1935                     |
| Bulgaria .. ..              | Treaty of Peace (10 February 1947) .. .. .  | 10 July 1948                    |
| Canada .. ..                | Agreement for the Avoidance of Double Taxation and Prevention of Fiscal Evasion with respect to Taxes on Income (1 October 1957)                                | 21 May 1958                     |
| Ceylon .. ..                | Agreement for the Establishment of Air Services (12 January 1950) ..  | 12 January 1950                 |
| China .. ..                 | Treaty Relating to the Chinese Customs Tariff, etc. (20 December 1928)  | 1 February 1929                 |
| Czechoslovakia .. ..        | Convention—Legal Proceedings in Civil and Commercial Matters (11 November 1924)   | 9 November 1933                 |
| Czechoslovakia .. ..        | Convention Supplementary to the Convention of 1924 (15 February 1935)   | 7 May 1936                      |
| Denmark .. ..               | Convention—Legal Proceedings in Civil and Commercial Matters (29 November 1932)   | 28 February 1935                |
| Egypt .. ..                 | Agreement for the Establishment of Air Services (14 June 1952) ..   | 12 October 1952                 |
| Egypt .. ..                 | Exchange of Notes modifying the Annex to the Air Services Agreement of 14 June 1952 (1 August 1955)   | 1 August 1955                   |
| Estonia .. ..               | Agreement regarding Tonnage Measurement of Merchant Ships (24 June 1926)  | 24 June 1926                    |
| Estonia .. ..               | Convention—Legal Proceedings in Civil and Commercial Matters (22 December 1931)   | 26 November 1933                |
| Federal Republic of Germany | Convention regarding Legal Proceedings in Civil and Commercial Matters (20 March 1928)  | Re-applying as from 1 July 1954 |
| Federal Republic of Germany | Agreement regarding German External Debts (27 February 1953) ..   | 24 November 1954                |
| Federal Republic of Germany | Exchange of Notes relating to War Graves (5 March 1956) ..  | 12 June 1957                    |
| Federal Republic of Germany | Agreement relating to Air Transport (22 May 1957) .. ..   | 10 January 1959                 |
| Federal Republic of Germany | Trade Agreement (14 October 1959) .. .. .   | 1 July 1959                     |
| Federation of Malaya ..     | Agreement relating to Air Services (29 September 1959) .. ..  | 29 September 1959               |
| Federation of Malaya ..     | Agreement concerning the Reciprocal Exchange of Planting Material between the Federation of Malaya and the Territory of Papua and New Guinea (26 November 1962) | 26 November 1962                |
| Malaysia .. ..              | Agreement relating to Air Services (19 March 1964) .. .. .  | 19 March 1964                   |
| Finland .. ..               | Convention regarding Legal Proceedings in Civil and Commercial Matters (11 August 1933)   | 1 March 1935                    |
| Finland .. ..               | Treaty of Peace (10 February 1947) .. .. .  | 10 July 1948                    |
| France .. ..                | Convention—Legal Proceedings in Civil and Commercial Matters (2 February 1922)  | 22 June 1928                    |
| France .. ..                | War Damage Compensation Agreement (28 September 1951) ..  | 28 September 1951               |
| France .. ..                | Convention supplementary to the Convention of 2 February 1922 respecting legal proceedings (15 April 1936)  | 9 October 1959                  |
| France .. ..                | Agreement relating to Air Transport (13 April 1965) .. ..   | 3 April 1965                    |

## (B) BILATERAL TREATIES: EXCLUDING EXTRADITION TREATIES—continued

| Country or Organisation | Description and date of signature  | Applying as from—   |
|-------------------------|--|---|
| France .. ..            | Amendment of Air Services Agreement .. .. .  | 6 April 1971  |
| Greece .. ..            | Agreement respecting the Measurement of Tonnage of Merchant Ships (30 November 1926)   | 30 November 1926  |
| Greece .. ..            | Convention—Legal Proceedings in Civil and Commercial Matters (27 February 1936)  | 14 December 1938  |
| Greece .. ..            | Air Services Agreement .. .. .   | 10 June 1971  |
| Hungary .. ..           | Convention regarding Legal Proceedings in Civil and Commercial Matters (25 September 1935)   | 20 August 1937  |
| Hungary .. ..           | Treaty of Peace (10 February 1947) .. .. .   | 10 July 1948  |
| India .. ..             | Agreement for the Establishment of Air Services (11 July 1949) ..  | 11 July 1949  |
| India .. ..             | Exchange of Notes modifying the Air Services Agreement between Australia and India of 11 June 1949 and the Exchange of Notes associated therewith (14 December 1960)                                     | 14 December 1960  |
| India .. ..             | Exchange of Notes further modifying the Air Services Agreement of 11 June 1949 as modified by the Exchange of Notes of 14 December 1960 (10 July 1965)   | 10 July 1965  |
| Indonesia .. ..         | Agreement for Air Services (7 March 1969) .. .. .  | 7 March 1969  |
| Iran .. ..              | Air Services Agreement (20 December 1960) .. .. .  | 31 May 1966   |
| Iraq .. ..              | Convention—Legal Proceedings in Civil and Commercial Matters (25 July 1935)  | 7 October 1937  |
| Ireland .. ..           | Exchange of Notes constituting an Air Transport Agreement (26 November–30 December 1957)   | 26 November 1957  |
| Italy .. ..             | Convention regarding Legal Proceedings in Civil and Commercial Matters (17 December 1930)  | 9 November 1933   |
| Italy .. ..             | Treaty of Peace (10 November 1947) .. .. .   | 9 July 1948   |
| Italy .. ..             | Agreement regarding War Graves and Supplementary Exchange of Notes (27 August 1953)  | 20 May 1955   |
| Italy .. ..             | Agreement relating to Air Services (10 November 1960) .. .. .  | 10 May 1963   |
| Japan .. ..             | Agreement respecting the Tonnage and Measurement of Merchant Ships (30 November 1922)  | 30 November 1922.<br>Re-applied<br>27 July 1953                       |
| Japan .. ..             | Treaty of Peace (8 September 1951) .. .. .   | 28 April 1952   |
| Japan .. ..             | Exchange of Notes regarding application to Australian Territories of the Agreement of 30 November 1922 respecting the Tonnage Measurement of Merchant Ships (10 September–12 October 1953)               | 12 October 1953   |
| Japan .. ..             | Agreement for the Establishment of Air Services (19 January 1956) ..   | 27 April 1956   |
| Japan .. ..             | Agreement on Fisheries .. .. .   | 25 July 1969  |
| Latvia .. ..            | Agreement Relating to Tonnage Measurement Certificates (24 June 1927)  | 24 June 1927  |
| Lebanon .. ..           | Agreement for the Establishment of Air Services (29 September 1953)  | 15 January 1954   |
| Lithuania .. ..         | Convention—Legal Proceedings in Civil and Commercial Matters (24 April 1934)   | 31 August 1937  |
| Malaysia .. ..          | Agreement relating to Air Services (9 October 1967) .. .. .  | 9 October 1967  |
| Malaysia .. ..          | Amendment to Air Services Agreement .. .. .  | 6 April 1971  |
| Malaysia .. ..          | Exchange of Notes amending the Air Services Agreement between Malaysia and Australia (9 October 1967)  | 29 October 1970   |
| Nauru .. ..             | Agreement Relating to Air Services .. .. .   | 17 September 1969   |
| Netherlands .. ..       | Convention—Legal Proceedings in Civil and Commercial Matters (31 May 1932)   | 8 April 1935  |
| Netherlands .. ..       | Exchange of Notes between Australian and Netherlands Governments Recording Agreement of Boundary between Dutch New Guinea and Mandated Territory of New Guinea (14 September 1936)                       | 14 September 1936   |
| Netherlands .. ..       | Exchange of Notes concerning Reciprocal Exemptions from Duties and Charges in respect of Non-Scheduled Flights (29 November 1956)  | Entered into force<br>14 April 1958,<br>retroactive to 1<br>July 1955 |
| Netherlands .. ..       | Exchange of Notes between Australia and the Netherlands extending the Australia-Netherlands Postal Parcels Agreement of 22 October 1953, to Papua, New Guinea and Netherlands New Guinea (4 August 1959) | 30 September 1960   |
| Netherlands .. ..       | Exchange of Notes between Australia and the Netherlands for the further Amendment of the Agreement of 22 October 1953, for the Exchange of Postal Parcels (18 October 1960)                              | 10 August 1961  |
| New Zealand .. ..       | Agreement relating to Air Services (25 July 1961) .. .. .  | 25 July 1961  |
| Norway .. ..            | Convention—Legal Proceedings in Civil and Commercial Matters (30 January 1931)   | 3 November 1933   |

## APPENDIX XXIII—continued

## (B) BILATERAL TREATIES: EXCLUDING EXTRADITION TREATIES—continued

| Country or Organisation  | Description and date of signature   | Applying as from—             |
|--|---|-------------------------------|
| Philippines .. ..  | Air Services Agreement (15 November 1971) .. .. .   | 27 June 1972                  |
| Poland .. ..   | Convention—Legal Proceedings in Civil and Commercial Matters (26 August 1931)   | 8 December 1933               |
| Poland .. ..   | Convention relating to the Tonnage Measurement of Merchant Ships (16 April 1934)  | 20 April 1935                 |
| Poland .. ..   | Exchange of Notes extending to Free City of Danzig Convention of 1934 (26 June 1936)  | 11 July 1936                  |
| Portugal .. ..   | Agreement in regard to Tonnage Measurement of Merchant Ships (20 May 1926)  | 20 May 1926                   |
| Portugal .. ..   | Convention—Legal Proceedings in Civil and Commercial Matters (9 July 1931)  | 11 November 1933              |
| Portugal .. ..   | Exchange of Notes regarding Documents of Identity for Aircraft Personnel (8 January 1940)   | 8 February 1940               |
| Republic of Ireland ..   | Exchange of Notes constituting an Air Transport Agreement (26 November–30 December 1957)  | 26 November 1957              |
| Roumania .. ..   | Treaty of Peace (10 February 1947) .. .. .  | 10 July 1948                  |
| Singapore .. ..  | Agreement relating to Air Services (3 November 1967) .. ..  | 3 November 1967               |
| South Africa .. ..   | Agreement for the Establishment of Air Services (4 November 1955) ..  | Applying from<br>29 July 1952 |
| South Africa .. ..   | Agreement Relating to Air Services .. .. .  | 2 April 1970                  |
| Spain .. ..  | Convention—Legal Proceedings in Civil and Commercial Matters (27 June 1929)   | 10 November 1933              |
| Sweden .. ..   | Convention—Legal Proceedings in Civil and Commercial Matters (28 August 1930)   | 2 November 1933               |
| Switzerland .. ..  | Convention—Legal Proceedings in Civil and Commercial Matters (3 December 1937)  | 11 March 1940                 |
| Thailand .. ..   | Agreement relating to Air Services (26 February 1960) .. .. .   | 26 February 1960              |
| Turkey .. ..   | Convention—Legal Proceedings in Civil and Commercial Matters (28 November 1931)   | 3 March 1935                  |
| United Kingdom .. ..   | Agreement for the avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect of Taxes on Income (29 October 1946)                                       | 3 June 1947                   |
| United Kingdom .. ..   | Trade Agreement (26 February 1957) .. .. .  | 9 November<br>1956            |
| United Kingdom .. ..   | Agreement for Air Services (7 February 1958) .. .. .  | 7 February 1958               |
| United Kingdom .. ..   | Exchange of Notes Amending Air Services Agreement, 1958 (23 June—22 August 1966)  | 22 August 1966                |
| United Nations Children's Fund                                     | Agreement concerning co-operation in relation to projects to be carried out in the Territory of Papua and the Trust Territory of New Guinea (21 December 1967)              | 21 December 1967              |
| United Nations Development Programme                               | Agreement concerning assistance from the Special Fund for the Territory of Papua and the Trust Territory of New Guinea and accompanying Exchange of Notes (6 February 1967) | 6 February 1967               |
| United Nations Development Programme (Technical Assistance Sector) | Agreement concerning assistance in relation to projects to be carried out in the Territory of Papua and the Trust Territory of New Guinea (21 May 1968)                     | 21 May 1968                   |
| United Nations Special Fund  | Agreement concerning Assistance from the Special Fund for a Project of Research in the Control of the Coconut Rhinoceros Beetle (30 September 1964)                         | 30 September 1964             |
| United States of America   | Agreement for the Establishment of Air Services (3 December 1946) ..  | 3 December 1946               |
| United States of America   | Agreement for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income (14 May 1953)   | 1 July 1953                   |
| United States of America   | Agreement for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to the Taxes on Gifts (14 May 1953)  | 14 December 1953              |
| United States of America   | Agreement for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to the Taxes on Estates of Deceased Persons (14 May 1953)                  | 7 January 1954                |
| United States of America   | Exchange of Notes amending the Air Transport Agreement of 3 December 1946 (12 August 1957)  | 12 August 1957                |
| United States of America   | Agreement concerning the Exchange of Postal Parcels between the United States of America and the Territory of Papua and Trust Territory of New Guinea (22 May–20 June 1958) | 1 October 1958                |
| United States of America   | Agreement concerning the Status of United States Forces in Australia and Protocol (9 May 1963)  | 9 May 1963                    |
| World Health Organisation  | Agreement for the Provision of Technical Advisory Assistance to the Territory of Papua and the Trust Territory of New Guinea (17 March 1969)                                | 17 March 1969                 |
| Yugoslavia .. ..   | Convention—Legal Proceedings in Civil and Commercial Matters (27 February 1936)   | 23 June 1938                  |

## (C) EXTRADITION TREATIES

| Country              | Description and date of signature   | Applying as from— |
|----------------------|---|-------------------|
| Albania .. ..        | Extradition Treaty (22 July 1926)   | 16 March 1928     |
| Albania .. ..        | Exchange of Notes regarding Extradition for Dangerous Drugs Offences (11 December 1935–16 May 1936)   | 16 May 1936       |
| Belgium .. ..        | Treaty for the Mutual Surrender of Fugitive Criminals (29 October 1901)   | 1 August 1928     |
| Belgium .. ..        | Convention Supplementing Article XIV of Treaty of 1901 (5 March 1907)   | 1 August 1928     |
| Belgium .. ..        | Convention amending Article VI of Treaty of 1901 (3 March 1911)   | 1 August 1928     |
| Belgium .. ..        | Convention extending to the Belgian Congo and Certain British Protectorates Existing Extradition Conventions between United Kingdom and Belgium (8 August 1923) | 1 August 1928     |
| Belgium .. ..        | Exchanges of Notes regarding the Extension of the Convention of 1923 to certain British and Belgian Mandated Territories (28 June 1928–2 July 1928)             | 1 August 1928     |
| Bolivia .. ..        | Treaty for the Mutual Surrender of Fugitive Criminals (22 February 1892)  | 18 February 1928  |
| Chile .. ..          | Treaty for the Mutual Surrender of Fugitive Criminals (26 January 1897)   | 13 January 1928   |
| Colombia .. ..       | Treaty for the Mutual Surrender of Fugitive Criminals (27 October 1888)   | 5 December 1930   |
| Colombia .. ..       | Convention Supplementary to the Treaty of 1888 (2 December 1929)  | 5 December 1930   |
| Cuba .. ..           | Treaty for the Mutual Surrender of Fugitive Criminals (3 October 1904)  | 12 December 1931  |
| Cuba .. ..           | Convention extending to Certain Protectorates and Mandated Territories the Treaty of 1904 (17 April 1930)   | 12 December 1931  |
| Czechoslovakia .. .. | Treaty for the Extradition of Criminals (11 November 1924)  | 15 July 1927      |
| Czechoslovakia .. .. | Protocol amending Article 12 of the Treaty of 1924 (4 June 1926)  | 15 July 1927      |
| Denmark .. ..        | Convention supplementary to Treaty of 1873 (15 October 1935)  | 9 November 1936   |
| Ecuador .. ..        | Treaty for the Mutual Surrender of Fugitive Criminals (20 September 1880)   | 19 January 1928   |
| Ecuador .. ..        | Convention supplementary to the Treaty of 1880 (4 June 1934)  | 8 November 1937   |
| El Salvador .. ..    | Treaty for the Mutual Surrender of Fugitive Criminals (23 June 1881)  | 8 August 1930     |
| Estonia .. ..        | Convention for the Extradition of Fugitive Criminals (18 November 1925)   | 10 March 1927     |
| Finland .. ..        | Treaty for the Extradition of Criminals (30 May 1924)   | 14 December 1924  |
| Greece .. ..         | Treaty for the Mutual Surrender of Fugitive Criminals (24 September 1910)   | 19 April 1928     |
| Guatemala .. ..      | Treaty for the Mutual Surrender of Fugitive Criminals (4 July 1885)   | 11 September 1929 |
| Guatemala .. ..      | Protocol amending Article X of Treaty of 1885 (30 May 1914)   | 11 September 1929 |
| Haiti .. ..          | Treaty for the Mutual Surrender of Fugitive Criminals (7 December 1874)   | 13 January 1928   |
| Hungary .. ..        | Treaty for the Mutual Surrender of Fugitive Criminals (3 December 1873)   | 25 April 1928     |
| Hungary .. ..        | Declaration Amending Article XI of the Treaty of 3 December 1873, for the Mutual Surrender of Fugitive Criminals (26 June 1901)                                 | 25 April 1928     |
| Hungary .. ..        | Treaty Supplementary to the Treaty of 3 December 1873, Regarding Extradition (18 September 1936)  | 22 March 1938     |
| Iceland .. ..        | Treaty for the Mutual Surrender of Fugitive Criminals (31 March 1873)   | 25 November 1937  |
| Iceland .. ..        | Exchange of Notes Regarding the Extension to Nauru and New Guinea of the Treaty of 1873 insofar as that Treaty applies to Iceland (25 November 1937)            | 25 November 1937  |
| Iceland .. ..        | Supplementary Convention Regarding Application of Treaty of 1873 to Iceland (25 October 1938)   | 13 December 1939  |
| Iraq .. ..           | Extradition Treaty (2 May 1932)   | 21 August 1934    |
| Latvia .. ..         | Treaty for the Extradition of Fugitive Criminals (16 July 1924)   | 1 January 1926    |
| Liberia .. ..        | Treaty for the Mutual Surrender of Fugitive Criminals (16 December 1892)  | 16 October 1928   |
| Lithuania .. ..      | Treaty for the Extradition of Fugitive Criminals (18 May 1926)  | 11 May 1928       |
| Luxembourg .. ..     | Treaty for the Mutual Surrender of Fugitive Criminals (24 November 1880)  | 28 January 1928   |
| Luxembourg .. ..     | Convention Supplementary to the Treaty of 1880 (23 January 1937)  | 1 August 1938     |
| Luxembourg .. ..     | Convention amending the Treaty of 24 November 1880 for the Mutual Surrender of Fugitive Criminals (29 May 1939)   | 26 September 1950 |
| Monaco .. ..         | Treaty for the Extradition of Criminals (17 December 1891)  | 5 July 1931       |
| Monaco .. ..         | Convention for the Extension to certain Protectorates and Mandated Territories of the Treaty of 1891 (27 November 1930)   | 5 July 1931       |

## APPENDIX XXIII—continued

## (C) EXTRADITION TREATIES—continued

| Country                  | Description and date of signature  | Applying as from— |
|--------------------------|--|-------------------|
| Netherlands .. ..        | Treaty for the Mutual Surrender of Fugitive Criminals (26 September 1898)                                  | 27 January 1928   |
| Nicaragua .. ..          | Treaty for the Mutual Extradition of Fugitive Criminals (19 April 1905)                                    | 12 January 1928   |
| Norway .. ..             | Treaty for the Mutual Surrender of Fugitive Criminals (26 June 1873)                                       | 13 December 1928  |
| Norway .. ..             | Supplementary Agreement Respecting the Mutual Surrender of Fugitive Criminals (18 February 1907)           | 13 December 1928  |
| Panama .. ..             | Treaty for the Mutual Surrender of Fugitive Criminals (25 August 1906)                                     | 24 January 1928   |
| Paraguay .. ..           | Treaty for the Mutual Surrender of Fugitive Criminals (12 September 1908)                                  | 16 January 1928   |
| Paraguay .. ..           | Supplementary Extradition Convention (30 September 1933)   | 22 November 1942  |
| Peru .. ..               | Treaty for the Mutual Surrender of Fugitive Criminals (26 January 1904)                                    | 16 January 1928   |
| Poland .. ..             | Extradition Treaty (11 January 1932)   | 4 January 1935    |
| Portugal .. ..           | Treaty for the Mutual Surrender of Fugitive Criminals (17 October 1892)                                    | 23 June 1934      |
| Portugal .. ..           | Supplementary Extradition Convention (20 January 1932)   | 23 June 1934      |
| Roumania .. ..           | Treaty for the Mutual Surrender of Fugitive Criminals and Protocol (21 March 1893)                         | 12 January 1929   |
| Roumania .. ..           | Protocol explanatory of Section 21 of Article 2 of the Extradition Treaty of 21 March 1893 (13 March 1894) | 12 January 1929   |
| San Marino .. ..         | Treaty for the Mutual Extradition of Fugitive Criminals (16 October 1899)                                  | 19 July 1934      |
| Spain .. ..              | Treaty for the Mutual Surrender of Fugitive Criminals (4 June 1878)  | 13 February 1928  |
| Spain .. ..              | Declaration amending Treaty of 1878 (19 February 1889)   | 13 February 1928  |
| Switzerland .. ..        | Treaty for the Mutual Surrender of Fugitive Criminals (26 November 1880)                                   | 19 September 1929 |
| Switzerland .. ..        | Convention supplementing Article XVIII of Treaty of 1880 (29 June 1904)                                    | 19 September 1929 |
| Switzerland .. ..        | Convention supplementary to Treaty of 1880 (19 December 1934)  | 3 January 1936    |
| Thailand .. ..           | Treaty respecting the Extradition of Fugitive Criminals (4 March 1911)                                     | 27 February 1928  |
| United States of America | Extradition Treaty (22 December 1931)  | 30 August 1935    |
| Yugoslavia .. ..         | Treaty for the Mutual Extradition of Fugitive Criminals (6 December 1900)                                  | 1 November 1928   |

## (D) INTERNATIONAL AGREEMENTS WITH ENEMY AND EX-ENEMY COUNTRIES WHICH APPLIED TO PAPUA NEW GUINEA PRIOR TO 3 SEPTEMBER 1939. THE FUTURE STATUS OF THESE AGREEMENTS HAS YET TO BE DETERMINED

| Country       | Description and date of signature  | Applying as from— |
|---------------|--|-------------------|
| Austria .. .. | Treaty for the Mutual Surrender of Fugitive Criminals (3 December 1873)  | 23 January 1928   |
| Austria .. .. | Declaration amending Article II of the Treaty of 3 December 1873 for the Mutual Surrender of Fugitive Criminals (26 January 1901)  | 23 January 1928   |
| Austria .. .. | Supplementary Extradition Convention additional to 1873 Treaty (29 October 1934)   | 30 August 1935    |
| Germany .. .. | Treaty for the Mutual Surrender of Fugitive Criminals (14 May 1872)  | 17 August 1930    |
| Germany .. .. | Agreement between the Government of the Commonwealth of Australia and the German Government regarding the Release of Property Rights and Interest of German Nationals with Exchange of Notes (17 January 1930) | 26 May 1930       |

## 2. TRUSTEESHIP AGREEMENT FOR THE TERRITORY OF NEW GUINEA

*Approved by the General Assembly of the United Nations at the Sixty-Second Plenary Meeting of its First Session on 13th December 1946*

The Territory of New Guinea has been administered in accordance with Article 22 of the Covenant of the League of Nations and in pursuance of a mandate conferred upon His Britannic Majesty and exercised on His behalf by the Government of the Commonwealth of Australia.

The Charter of the United Nations, signed at San Francisco on 26th June 1945, provides by Article 75 for the establishment of an international trusteeship system for the administration and supervision of such territories as may be placed thereunder by subsequent individual agreements.

The Government of Australia now undertakes to place the Territory of New Guinea under the trusteeship system, on the terms set forth in the present Trusteeship Agreement.

Therefore the General Assembly of the United Nations, acting in pursuance of Article 85 of the Charter, approves the following terms of trusteeship for the Territory of New Guinea, in substitution for the terms of the Mandate under which the Territory has been administered.

*Article 1*

The Territory to which this Trusteeship Agreement applies (hereinafter called the Territory) consists of that portion of the island of New Guinea and the groups of islands administered therewith under the Mandate dated 17th December 1920, conferred upon His Britannic Majesty and exercised by the Government of Australia.

*Article 2*

The Government of Australia (hereinafter called the Administering Authority) is hereby designated as the sole authority which will exercise the administration of the Territory.

*Article 3*

The Administering Authority undertakes to administer the Territory in accordance with the provisions of the Charter and in such a manner as to achieve in the Territory the basic objectives of the international trusteeship system, which are set forth in Article 76 of the Charter.

*Article 4*

The Administering Authority will be responsible for the peace, order, good government and defence of the Territory and for this purpose will have the same powers of legislation, administration and jurisdiction in and over the Territory as if it were an integral part of Australia and will be entitled to apply to the Territory, subject to such modifications as it deems desirable, such laws of the Commonwealth of Australia as it deems appropriate to the needs and conditions of the Territory.

*Article 5*

It is agreed that the Administering Authority, in the exercise of its powers under Article 4 will be at liberty to bring the Territory into a customs, fiscal or administrative union or federation with other dependent territories under its jurisdiction or control, and to establish common services between the Territory and any or all of these territories, if in its opinion it would be in the interests of the Territory and not inconsistent with the basic objectives of the trusteeship system to do so.

*Article 6*

The Administering Authority further undertakes to apply in the Territory the provisions of such international agreements and such recommendations of the specialized agencies referred to in Article 57 of the Charter as are, in the opinion of the Administering Authority, suited to the needs and conditions of the Territory and conducive to the achievement of the basic objectives of the trusteeship system.

*Article 7*

The Administering Authority may take all measures in the Territory which it considers desirable to provide for the defence of the Territory and for maintenance of international peace and security.

*Article 8*

The Administering Authority undertakes that in the discharge of its obligations under Article 3 of this agreement:

1. It will co-operate with the Trusteeship Council in the discharge of all the Council's functions under Articles 87 and 88 of the Charter.

2. It will, in accordance with its established policy:

- (a) take into consideration the customs and usages of the inhabitants of New Guinea and respect the rights and safeguard the interests, both present and future, of the indigenous inhabitants of the Territory, and in particular ensure that no rights over native land in favour of any person not an indigenous inhabitant of New Guinea may be created or transferred except with the consent of the competent public authority;
- (b) promote, as may be appropriate to the circumstances of the Territory, the educational and cultural advancement of the inhabitants;
- (c) assure to the inhabitants of the Territory, as may be appropriate to the particular circumstances of the Territory and its peoples, a progressively increasing share in the administrative and other services of the Territory; and
- (d) guarantee to the inhabitants of the Territory, subject only to the requirements of public order, freedom of speech, of the press, of assembly and of petition, freedom of conscience and worship and freedom of religious teaching.

## APPENDIX XXIV

### CLIMATIC CONDITIONS

#### I. MONTHLY MEAN MAXIMUM AND MINIMUM TEMPERATURES, RELATIVE HUMIDITY, RAINFALL AND RAIN DAYS IN MAJOR TOWNS FOR YEAR ENDED 30 JUNE 1972

| Place        | Month     | Mean maximum |        | Mean minimum |        | Mean<br>9 a.m.<br>relative<br>humidity<br>% | Monthly<br>rainfall | Number<br>of days |
|--------------|-----------|--------------|--------|--------------|--------|---|---------------------|-------------------|
|              |           | °C           | °F     | °C           | °F     |   |                     |                   |
| Port Moresby | 1971—     |              |        |              |        |   |                     |                   |
|              | July      | 28.9         | (84.0) | 22.2         | (71.9) | 81  | 111                 | 9                 |
|              | August    | 30.4         | (86.7) | 22.1         | (71.8) | 82  | 40                  | 5                 |
|              | September | 31.0         | (87.8) | 23.0         | (73.4) | 78  | 105                 | 12                |
|              | October   | 32.1         | (89.8) | 22.9         | (73.3) | 71  | 100                 | 11                |
|              | November  | 33.0         | (91.4) | 22.8         | (73.1) | 63  | 248                 | 6                 |
|              | December  | 31.5         | (88.7) | 22.7         | (72.8) | 78  | 495                 | 14                |
|              | 1972—     |              |        |              |        |   |                     |                   |
|              | January   | 30.7         | (87.2) | 22.6         | (72.7) | 82  | 714                 | 19                |
|              | February  | 30.6         | (87.1) | 22.7         | (72.8) | 86  | 1,078               | 21                |
|              | March     | 30.6         | (87.0) | 22.3         | (72.2) | 82  | 1,238               | 20                |
|              | April     | 30.2         | (86.3) | 22.3         | (72.2) | 86  | 259                 | 18                |
|              | May       | 28.8         | (83.8) | 21.7         | (71.1) | 82  | 569                 | 14                |
|              | June      | 29.2         | (84.6) | 21.2         | (70.1) | 77  | 11                  | 2                 |
| Lae          | 1971—     |              |        |              |        |   |                     |                   |
|              | July      | 27.9         | (82.3) | 22.3         | (72.1) | 91  | 1,083               | 22                |
|              | August    | 28.8         | (83.8) | 22.2         | (71.9) | 86  | 1,280               | 23                |
|              | September | 29.4         | (84.9) | 22.7         | (72.9) | 82  | 1,066               | 20                |
|              | October   | 30.1         | (86.2) | 23.1         | (73.6) | 76  | 2,119               | 20                |
|              | November  | 31.7         | (89.1) | 23.9         | (75.1) | 75  | 289                 | 11                |
|              | December  | 31.4         | (88.6) | 24.3         | (75.8) | 71  | 863                 | 10                |
|              | 1972—     |              |        |              |        |   |                     |                   |
|              | January   | 30.6         | (87.0) | 24.2         | (75.6) | 75  | 1,076               | 21                |
|              | February  | 30.9         | (87.6) | 23.7         | (74.7) | 82  | 1,041               | 20                |
|              | March     | 30.1         | (86.1) | 23.6         | (74.5) | 82  | 1,537               | 22                |
|              | April     | 29.7         | (85.5) | 23.6         | (74.5) | 86  | 1,221               | 20                |
|              | May       | 29.3         | (84.7) | 23.0         | (73.4) | 82  | 1,475               | 19                |
|              | June      | 28.2         | (82.7) | 23.1         | (73.5) | 88  | 2,080               | 23                |
| Madang       | 1971—     |              |        |              |        |   |                     |                   |
|              | July      | 29.4         | (84.9) | 22.5         | (72.5) | 86  | 1,406               | 23                |
|              | August    | 30.1         | (86.2) | 22.6         | (72.7) | 82  | 858                 | 20                |
|              | September | 30.2         | (86.3) | 23.0         | (73.4) | 82  | 1,109               | 21                |
|              | October   | 30.3         | (86.5) | 22.8         | (73.0) | 82  | 2,323               | 22                |
|              | November  | 30.3         | (86.5) | 23.1         | (73.5) | 82  | 1,551               | 21                |
|              | December  | 30.4         | (86.7) | 23.3         | (74.0) | 82  | 1,631               | 22                |
|              | 1972—     |              |        |              |        |   |                     |                   |
|              | January   | 29.7         | (85.5) | 23.0         | (73.4) | 86  | 2,446               | 25                |
|              | February  | 29.9         | (85.9) | 23.1         | (73.6) | 86  | 1,380               | 23                |
|              | March     | 29.9         | (85.8) | 23.2         | (73.8) | 83  | 1,046               | 24                |
|              | April     | 29.9         | (85.8) | 23.2         | (73.8) | 84  | 1,651               | 19                |
|              | May       | 29.8         | (85.6) | 23.1         | (73.6) | 82  | 3,175               | 26                |
|              | June      | 29.7         | (85.5) | 23.6         | (74.5) | 82  | 134                 | 9                 |
| Goroka       | 1971—     |              |        |              |        |   |                     |                   |
|              | July      | 24.2         | (75.6) | 14.1         | (57.4) | 84  | 348                 | 14                |
|              | August    | 25.1         | (77.2) | 12.7         | (54.9) | 81  | 115                 | 8                 |
|              | September | 25.8         | (78.5) | 14.1         | (57.4) | 80  | 465                 | 17                |
|              | October   | 26.1         | (78.9) | 14.3         | (57.8) | 78  | 569                 | 20                |
|              | November  | 25.9         | (78.7) | 14.1         | (57.4) | 80  | 295                 | 17                |
|              | December  | 26.1         | (79.0) | 14.7         | (58.4) | 85  | 790                 | 22                |
|              | 1972—     |              |        |              |        |   |                     |                   |
|              | January   | 25.0         | (77.0) | 14.9         | (58.9) | 85  | 896                 | 25                |
|              | February  | 24.2         | (75.6) | 15.1         | (59.2) | 85  | 832                 | 19                |
|              | March     | 24.9         | (76.8) | 15.1         | (59.2) | 89  | 964                 | 27                |
|              | April     | 25.1         | (77.1) | 15.1         | (59.1) | 88  | 1,168               | 23                |
|              | May       | 25.3         | (77.5) | 13.4         | (56.2) | 87  | 590                 | 14                |
|              | June      | 25.2         | (77.3) | 14.1         | (57.3) | 86  | 37                  | 2                 |



## APPENDIX XXIV—continued

## 1. MONTHLY MEAN MAXIMUM AND MINIMUM TEMPERATURES, RELATIVE HUMIDITY, RAINFALL AND RAIN DAYS IN MAJOR TOWNS FOR YEAR ENDED 30 JUNE 1972—continued

| Place                    | Month           | Mean maximum |        | Mean minimum |        | Mean<br>9 a.m.<br>relative<br>humidity | Monthly<br>rainfall | Number<br>of days |
|--------------------------|-----------------|--------------|--------|--------------|--------|--|---------------------|-------------------|
|                          |                 | °C           | °F     | °C           | °F     | %                                      |                     |                   |
| Mount Hagen<br>Aerodrome | 1971—           |              |        |              |        |  |                     |                   |
|                          | July .. ..      | 24.2         | (75.5) | 13.1         | (55.5) | 87                                     | 765                 | 19                |
|                          | August .. ..    | 25.1         | (77.1) | 12.1         | (53.8) | 88                                     | 394                 | 15                |
|                          | September .. .. | 25.5         | (77.9) | 13.0         | (55.4) | 83                                     | 777                 | 20                |
|                          | October .. ..   | 25.2         | (77.3) | 13.6         | (56.4) | 78                                     | 704                 | 19                |
|                          | November .. ..  | 25.2         | (77.3) | 13.3         | (55.9) | 79                                     | 674                 | 16                |
|                          | December .. ..  | 25.7         | (78.2) | 13.5         | (56.3) | 82                                     | 903                 | 19                |
|                          | 1972—           |              |        |              |        |  |                     |                   |
|                          | January .. ..   | 24.2         | (75.6) | 14.2         | (57.6) | 85                                     | 876                 | 22                |
|                          | February .. ..  | 25.3         | (77.5) | 14.5         | (58.1) | 87                                     | 1,399               | 25                |
|                          | March .. ..     | 24.8         | (76.7) | 14.7         | (58.4) | 85                                     | 1,521               | 28                |
|                          | April .. ..     | 24.9         | (76.9) | 14.2         | (57.5) | 85                                     | 966                 | 24                |
|                          | May .. ..       | 24.2         | (75.6) | 13.4         | (56.1) | 85                                     | 763                 | 15                |
|                          | June .. ..      | 24.2         | (75.5) | 13.1         | (55.6) | 85                                     | 81                  | 8                 |
| Rabaul .. ..             | 1971—           |              |        |              |        |  |                     |                   |
|                          | July .. ..      | 30.6         | (87.1) | 23.1         | (73.5) | 79                                     | 870                 | 14                |
|                          | August .. ..    | 31.2         | (88.2) | 23.1         | (73.5) | 77                                     | 141                 | 10                |
|                          | September .. .. | 31.7         | (89.1) | 23.2         | (73.7) | 72                                     | 536                 | 11                |
|                          | October .. ..   | 31.5         | (88.7) | 23.3         | (73.9) | 74                                     | 625                 | 14                |
|                          | November .. ..  | 30.7         | (87.2) | 22.7         | (72.9) | 79                                     | 999                 | 21                |
|                          | December .. ..  | 30.4         | (86.7) | 22.9         | (73.3) | 79                                     | 829                 | 19                |
|                          | 1972—           |              |        |              |        |  |                     |                   |
|                          | January .. ..   | 29.6         | (85.3) | 22.7         | (72.8) | 82                                     | 1,145               | 20                |
|                          | February .. ..  | 30.6         | (87.1) | 22.9         | (73.2) | 83                                     | 662                 | 18                |
|                          | March .. ..     | 30.3         | (86.6) | 23.2         | (73.8) | 79                                     | 558                 | 19                |
|                          | April .. ..     | 30.3         | (86.5) | 23.1         | (73.5) | 79                                     | 592                 | 18                |
|                          | May .. ..       | 30.1         | (86.1) | 23.2         | (73.8) | 84                                     | 746                 | 20                |
|                          | June .. ..      | 30.6         | (87.1) | 24.1         | (75.4) | 79                                     | 116                 | 9                 |
| Kieta .. ..              | 1971—           |              |        |              |        |  |                     |                   |
|                          | July .. ..      | 29.5         | (85.1) | 22.8         | (73.0) | 78                                     | 814                 | 19                |
|                          | August .. ..    | 29.9         | (85.9) | 21.3         | (70.3) | 78                                     | 1,522               | 22                |
|                          | September .. .. | 30.1         | (86.1) | 22.2         | (71.9) | 77                                     | 1,233               | 19                |
|                          | October .. ..   | 29.9         | (85.8) | 22.1         | (71.8) | 77                                     | 1,760               | 25                |
|                          | November .. ..  | 30.2         | (86.4) | 22.4         | (72.4) | 75                                     | 808                 | 22                |
|                          | December .. ..  | 30.0         | (86.0) | 22.6         | (72.7) | 75                                     | 1,063               | 23                |
|                          | 1972—           |              |        |              |        |  |                     |                   |
|                          | January .. ..   | 29.8         | (85.6) | 22.4         | (72.3) | 68                                     | 1,320               | 21                |
|                          | February .. ..  | 29.8         | (85.7) | 22.4         | (72.4) | 82                                     | 1,253               | 17                |
|                          | March .. ..     | 30.9         | (87.7) | 22.6         | (72.7) | 72                                     | 556                 | 19                |
|                          | April .. ..     | 29.9         | (85.9) | 22.5         | (72.5) | 79                                     | 1,057               | 18                |
|                          | May .. ..       | 29.7         | (85.4) | 22.6         | (72.6) | 73                                     | 2,022               | 19                |
|                          | June .. ..      | 29.6         | (85.3) | 22.1         | (71.7) | 77                                     | 902                 | 21                |

## APPENDIX XXV

### RELIGIOUS MISSIONS

#### I. RELIGIOUS DENOMINATIONS OF POPULATION

The last time this information was collected was in the 1966 Census, the results of which have been published in previous Annual Reports.

#### 2. NATIONALITY OF EXPATRIATE MISSIONARIES AT 30 JUNE 1969 TO 1971

| Nationality           | Males        |              |              | Females      |              |              | Persons      |              |              |
|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                       | 1969         | 1970         | 1971         | 1969         | 1970         | 1971         | 1969         | 1970         | 1971         |
| Austrian .. .. .      | 12           | 17           | 18           | 16           | 13           | 14           | 28           | 30           | 32           |
| Belgian .. .. .       | ..           | 2            | 2            | 8            | 8            | 8            | 8            | 10           | 10           |
| British .. .. .       | 985          | 1,083        | 1,002        | 1,043        | 1,032        | 938          | 2,028        | 2,115        | 1,940        |
| Canadian .. .. .      | 23           | ..           | 50           | 36           | 2            | 35           | 59           | 2            | 85           |
| Dutch .. .. .         | 73           | 72           | 59           | 33           | 34           | 44           | 106          | 106          | 103          |
| French .. .. .        | 38           | 41           | 38           | 27           | 28           | 30           | 65           | 69           | 68           |
| German .. .. .        | 242          | 248          | 254          | 142          | 137          | 131          | 384          | 385          | 385          |
| Italian .. .. .       | 12           | 12           | 12           | 1            | ..           | ..           | 13           | 12           | 12           |
| Polish .. .. .        | 13           | 15           | 8            | 1            | 10           | 5            | 14           | 25           | 13           |
| Swiss .. .. .         | 34           | 39           | 48           | 31           | 37           | 52           | 65           | 76           | 100          |
| U.S. American .. .. . | 309          | 324          | 342          | 189          | 196          | 263          | 498          | 520          | 605          |
| Other .. .. .         | 40           | 36           | 23           | 28           | 25           | 12           | 68           | 61           | 35           |
| <b>Total .. .. .</b>  | <b>1,781</b> | <b>1,889</b> | <b>1,856</b> | <b>1,555</b> | <b>1,522</b> | <b>1,532</b> | <b>3,336</b> | <b>3,411</b> | <b>3,388</b> |

Note: Figures for year ended 30 June 1972 are not yet available.

#### 3. RESOURCES AVAILABLE TO RELIGIOUS ORGANISATIONS FOR YEAR ENDED 30 JUNE 1971

|   | \$'000 | \$'000 | %     |
|---|--------|--------|-------|
| (1) Overseas Aid (including value of imports received as gifts from)— |        |        |       |
| (a) Australia .. .. .   | 2,150  |        |       |
| (b) Other countries .. .. .   | 4,203  |        |       |
|   | —————  | 6,353  | 54.6  |
| (2) Administration Aid—   |        |        |       |
| (a) Building grants .. .. .   | 310    |        |       |
| (b) Health grants .. .. .   | 542    |        |       |
| (c) Health materials .. .. .  | 300    |        |       |
| (d) Education grants .. .. .  | 600    |        |       |
| (e) Education materials .. .. .                                       | 360    |        |       |
|   | —————  | 2,112  | 18.2  |
| (3) Other Local Aid—  |        |        |       |
| (a) Cash donations .. .. .  | 491    |        |       |
| (b) Food, etc. .. .. .  | 199    |        |       |
|   | —————  | 690    | 5.9   |
| (4) Food produced and consumed in institutions, etc. ..               |        | 36     | 0.3   |
| (5) Loans and borrowings .. .. .                                      |        | 315    | 2.7   |
| (6) Operating Surplus of Commercial Enterprises .. .. .               |        | 1,200  | 10.3  |
| (7) Depreciation (commercial and non-commercial enterprises) .. .. .  |        | 480    | 4.1   |
| (8) Other receipts .. .. .  |        | 450    | 3.9   |
|   | —————  | 11,636 | 100.0 |
| <b>Total .. .. .</b>  |        |        |       |

Note: Figures for year ended 30 June 1972 are not yet available.

## 4. ALLOCATION OF AVAILABLE RESOURCES TO RELIGIOUS ORGANISATIONS FOR YEAR ENDED 30 JUNE 1971

|  | \$'000 | \$'000 | %     |
|--|--------|--------|-------|
| <i>Current Expenditure on—</i>                 |        |        |       |
| (1) Education—                                 |        |        |       |
| (a) Wages, salaries, etc. .. ..                | 1,369  |        |       |
| (b) Other (materials, etc.) .. ..              | 842    |        |       |
| (2) Health—                                    |        | 2,211  | 19.0  |
| (a) Wages, salaries, etc. .. ..                | 909    |        |       |
| (b) Other (materials, etc.) .. ..              | 682    |        |       |
| (3) Religious and other activities—            |        | 1,591  | 13.7  |
| (a) Wages, salaries, etc. .. ..                | 2,209  |        |       |
| (b) Other (materials, etc.) .. ..              | 1,433  |        |       |
| <i>Capital Expenditure on—</i>                 |        | 3,642  | 31.3  |
| (4) Education—                                 |        |        |       |
| (a) Buildings and other structures .. ..       | 815    |        |       |
| (b) Other capital items .. ..                  | 183    |        |       |
| (5) Health—                                    |        | 998    | 8.6   |
| (a) Buildings and other structures .. ..       | 253    |        |       |
| (b) Other capital items .. ..                  | 125    |        |       |
| (6) Religious and other activities—            |        | 378    | 3.3   |
| (a) Buildings and other structures .. ..       | 995    |        |       |
| (b) Other capital items .. ..                  | 315    |        |       |
| (7) Commercial activities—                     |        | 1,310  | 11.3  |
| (a) Buildings and other structures .. ..       | 315    |        |       |
| (b) Other capital items .. ..                  | 387    |        |       |
| (c) Increase in value of stocks .. ..          | 127    |        |       |
| (8) Other expenditure and balancing item .. .. |        | 829    | 7.1   |
|  |        | 677    | 5.8   |
| Total .. ..                                    |        | 11,636 | 100.0 |
| <i>Total Expenditure on—</i>                   |        |        |       |
| Education .. ..                                |        | 3,209  | 27.6  |
| Health .. ..                                   |        | 1,969  | 16.9  |
| Religious and other activities .. ..           |        | 4,952  | 42.6  |
| Capital formation—Commercial activities .. ..  |        | 829    | 7.1   |
| Other expenditure and Balancing Item .. ..     |        | 677    | 5.8   |
| Total .. ..                                    |        | 11,636 | 100.0 |

Note: Figures for year ended 30 June 1972 are not yet available.

## 5. MISSIONARIES BY DENOMINATIONAL GROUP AT 30 JUNE 1971

| Group   | Papua New Guinean |         |         | Expatriate |         |         | Total |         |         |
|---|-------------------|---------|---------|------------|---------|---------|-------|---------|---------|
|   | Males             | Females | Persons | Males      | Females | Persons | Males | Females | Persons |
| Evangelical Alliance of the South Pacific .. .. | 467               | 125     | 592     | 254        | 359     | 613     | 721   | 484     | 1,205   |
| Melanesian Council of Churches .. ..            | 2,507             | 495     | 3,002   | 419        | 291     | 710     | 2,926 | 786     | 3,712   |
| Roman Catholic Church .. ..                     | 3,270             | 1,117   | 4,387   | 948        | 761     | 1,709   | 4,218 | 1,878   | 6,096   |
| Other Groups or Independent .. ..               | 1,201             | 129     | 1,330   | 235        | 121     | 356     | 1,436 | 250     | 1,686   |
| Total .. ..                                     | 7,445             | 1,866   | 9,311   | 1,856      | 1,532   | 3,388   | 9,301 | 3,398   | 12,699  |

Note: Figures for 1972 are not yet available.

## APPENDIX XXV—continued

## 6. MISSIONARIES BY OCCUPATIONAL GROUP AT 30 JUNE 1971

| Activity in which<br>primarily engaged | Papua New Guinean |         |         | Expatriate |         |         | Total |         |         |
|--|-------------------|---------|---------|------------|---------|---------|-------|---------|---------|
|  | Males             | Females | Persons | Males      | Females | Persons | Males | Females | Persons |
| Religious—                             |                   |         |         |            |         |         |       |         |         |
| Ordained .. ..                         | 554               | 39      | 593     | 832        | 67      | 899     | 1,386 | 106     | 1,492   |
| Lay .. ..                              | 2,140             | 270     | 2,410   | 221        | 344     | 565     | 2,361 | 614     | 2,975   |
| Total .. ..                            | 2,694             | 309     | 3,003   | 1,053      | 411     | 1,464   | 3,747 | 720     | 4,467   |
| Health—                                |                   |         |         |            |         |         |       |         |         |
| Doctors .. ..                          | 2                 | ..      | 2       | 18         | 10      | 28      | 20    | 10      | 30      |
| Nurses .. ..                           | 135               | 329     | 464     | 16         | 279     | 295     | 151   | 608     | 759     |
| Other .. ..                            | 166               | 155     | 321     | 10         | 26      | 36      | 176   | 181     | 357     |
| Total .. ..                            | 303               | 484     | 787     | 44         | 315     | 359     | 347   | 799     | 1,146   |
| Education—                             |                   |         |         |            |         |         |       |         |         |
| Teachers .. ..                         | 2,150             | 769     | 2,919   | 346        | 532     | 878     | 2,496 | 1,301   | 3,797   |
| Other .. ..                            | 519               | 61      | 580     | 88         | 89      | 177     | 607   | 150     | 757     |
| Total .. ..                            | 2,669             | 830     | 3,499   | 434        | 621     | 1,055   | 3,103 | 1,451   | 4,554   |
| Commercial activity—                   |                   |         |         |            |         |         |       |         |         |
| Managerial/Clerical ..                 | 77                | 26      | 103     | 90         | 93      | 183     | 167   | 119     | 286     |
| Professional/Technical ..              | 559               | 56      | 615     | 147        | 30      | 177     | 706   | 86      | 792     |
| Other .. ..                            | 1,143             | 161     | 1,304   | 88         | 62      | 150     | 1,231 | 223     | 1,454   |
| Total .. ..                            | 1,779             | 243     | 2,022   | 325        | 185     | 510     | 2,104 | 428     | 2,532   |
| Total .. ..                            | 7,445             | 1,866   | 9,311   | 1,856      | 1,532   | 3,388   | 9,301 | 3,398   | 12,699  |

Note: Figures for 1972 are not yet available.

## APPENDIX XXVI

### NATIONAL INCOME ESTIMATES FOR PAPUA NEW GUINEA

#### 1. TOTAL MARKET SUPPLIES FOR YEARS ENDED 30 JUNE 1967 TO 1971

|   | 1967       | 1968       | 1969       | 1970       | 1971       |
|---|------------|------------|------------|------------|------------|
|   | \$ million | \$ million | \$ million | \$ million | \$ million |
| <i>Monetary Sector—</i>                                       |            |            |            |            |            |
| Wages, Salaries and Supplements .. .. .                       | 113.7      | 128.6      | 144.5      | 169.7      | 197.1      |
| Primary Production Income—                                    |            |            |            |            |            |
| (i) Market Production .. .. .                                 | 21.4       | 25.3       | 34.3       | 36.3       | 36.8       |
| (ii) Non-market Production .. .. .                            | 22.0       | 25.0       | 25.9       | 27.5       | 29.4       |
| Total Primary Production .. .. .                              | 43.4       | 50.3       | 60.2       | 63.8       | 66.2       |
| Company Income .. .. .  | 23.0       | 29.8       | 30.8       | 41.4       | 55.6       |
| Operating Surplus of Public Authorities Business .. .. .      | 1.0        | 0.6        | 0.1        | 0.1        | 0.6        |
| Other Business Income .. .. .                                 | 13.9       | 14.6       | 17.0       | 19.7       | 29.8       |
| Income from Property .. .. .                                  | 1.6        | 1.9        | 2.2        | 2.5        | 3.0        |
| <i>Monetary Sector Income</i> .. .. .                         | 196.6      | 225.8      | 254.6      | 297.0      | 352.3      |
| Allowance for Depreciation .. .. .                            | 12.3       | 14.4       | 15.8       | 22.8       | 32.4       |
| <i>Gross Monetary Sector Product at Factor Cost</i> .. .. .   | 208.9      | 240.2      | 270.4      | 319.8      | 384.7      |
| Indirect Taxes less Subsidies .. .. .                         | 14.2       | 15.9       | 17.5       | 23.3       | 31.5       |
| <i>Gross Monetary Sector Product at Market Prices</i> .. .. . | 223.1      | 256.1      | 287.9      | 343.1      | 416.2      |
| Imports and Other Payments for Goods and Services .. .. .     | 157.4      | 178.3      | 185.2      | 267.9      | 324.5      |
| <i>Market Supplies of Monetary Sector</i> .. .. .             | 380.5      | 434.4      | 473.1      | 611.0      | 740.7      |
| <i>Subsistence Sector—</i>                                    |            |            |            |            |            |
| Subsistence Sector Income .. .. .                             | 185.2      | 190.1      | 198.5      | 204.4      | 205.4      |
| Total Market Supplies .. .. .                                 | 565.7      | 624.5      | 671.6      | 815.4      | 946.1      |

Note: Figures for year ended 30 June 1972 are not yet available.

## APPENDIX XXVI—continued

## 2. TOTAL MARKET EXPENDITURE FOR YEARS ENDED 30 JUNE 1967 TO 1971

|  | 1967       | 1968       | 1969       | 1970       | 1971p      |
|--|------------|------------|------------|------------|------------|
|  | \$ million | \$ million | \$ million | \$ million | \$ million |
| <i>Monetary Sector—</i>                                      |            |            |            |            |            |
| Personal Consumption—  |            |            |            |            |            |
| (i) Market Supplies .. .. .                                  | 110.5      | 124.2      | 144.7      | 172.8      | 186.7      |
| (ii) Non-market Supplies .. .. .                             | 22.0       | 25.0       | 25.9       | 27.5       | 29.4       |
| Total Personal Consumption .. .. .                           | 132.5      | 149.2      | 170.7      | 200.3      | 216.1      |
| Statistical Discrepancy .. .. .                              | -0.2       | 0.3        | -1.8       | -1.4       | *          |
| Net Current Expenditure on Goods and Services—               |            |            |            |            |            |
| 1. Mission .. .. .   | 6.4        | 7.2        | 6.7        | 7.7        | 5.1        |
| 2. Public Authorities—                                       |            |            |            |            |            |
| Administration .. .. .                                       | 57.8       | 65.0       | 77.0       | 84.6       | 88.1       |
| Local Government Councils .. .. .                            | 0.7        | 0.8        | 0.8        | 0.7        | 0.7        |
| Commonwealth Departments and Instrumentalities .. .. .       | 11.6       | 13.7       | 17.9       | 21.3       | 24.4       |
| Total Net Current Expenditure .. .. .                        | 76.5       | 86.7       | 102.4      | 114.3      | 11.83      |
| Gross Domestic Capital Formation—                            |            |            |            |            |            |
| 1. Private .. .. .   | 40.3       | 47.5       | 51.3       | 127.8      | 220.5      |
| 2. Mission .. .. .   | 1.4        | 1.5        | 1.6        | 1.5        | 1.8        |
| 3. Public Authorities—                                       |            |            |            |            |            |
| Administration .. .. .                                       | 33.6       | 39.8       | 38.3       | 46.1       | 49.4       |
| Papua and New Guinea Electricity Commission .. .. .          | 5.3        | 2.9        | 3.7        | 3.8        | 4.6        |
| Local Government Councils .. .. .                            | 1.2        | 1.7        | 2.3        | 3.5        | 3.8        |
| Commonwealth Departments and Instrumentalities .. .. .       | 25.0       | 17.6       | 12.0       | 7.8        | 6.7        |
| 4. Increase in the Value of Stocks .. .. .                   | 3.6        | 7.3        | 7.0        | 6.0        | 7.0        |
| Total Gross Domestic Capital Formation                       | 110.4      | 118.3      | 116.2      | 196.5      | 293.8      |
| Gross Monetary Sector Expenditure .. .. .                    | 319.2      | 354.5      | 387.3      | 512.5      | 628.2      |
| Exports and Other Receipts for Goods and Services            | 61.3       | 79.9       | 85.8       | 98.5       | 112.5      |
| Market Expenditure of Monetary Sector .. .. .                | 380.5      | 434.4      | 473.1      | 611.0      | 740.7      |
| <i>Subsistence Sector—</i>                                   |            |            |            |            |            |
| Subsistence Sector Expenditure—                              |            |            |            |            |            |
| 1. Consumption .. .. .                                       | 143.4      | 146.7      | 153.7      | 157.9      | 158.2      |
| 2. Private Investment, Replacement and Maintenance .. .. .   | 10.0       | 10.4       | 10.5       | 10.6       | 10.7       |
| 3. Community Investment, Replacement and Maintenance .. .. . | 31.8       | 33.0       | 34.3       | 35.9       | 36.5       |
| Subsistence Sector Expenditure .. .. .                       | 185.2      | 190.1      | 198.5      | 204.4      | 205.4      |
| Total Market Expenditure .. .. .                             | 565.7      | 624.5      | 671.6      | 815.4      | 946.1      |

\* Included in Monetary Sector

Note: Figures for year ended 30 June 1972 are not yet available.

3. BALANCE OF PAYMENTS: CURRENT AND CAPITAL ACCOUNTS FOR YEARS ENDED 30 JUNE 1967 TO 1971  
(\$ million)

|   | PAYMENTS |       |       |       |       |
|---|----------|-------|-------|-------|-------|
|   | 1967     | 1968  | 1969  | 1970p | 1971p |
| <i>Current Account—</i>                                   |          |       |       |       |       |
| Trade—  |          |       |       |       |       |
| Imports .. .. .   | 112.4    | 127.1 | 133.1 | 201.3 | 251.9 |
| Invisible Debits—   |          |       |       |       |       |
| Transportation .. .. .                                    | 20.8     | 23.6  | 26.7  | 32.9  | 45.9  |
| Travel .. .. .  | 12.9     | 13.7  | 15.3  | 16.5  | 17.5  |
| Miscellaneous .. .. .                                     | 11.3     | 13.9  | 10.1  | 17.2  | 9.2   |
| Total Remittances on Current Account .. .. .              | 45.0     | 51.2  | 52.1  | 66.6  | 72.6  |
| Imports and Other Payments for Goods and Services .. .. . | 157.4    | 178.3 | 185.2 | 267.9 | 324.5 |
| Total .. .. .   | 157.4    | 178.3 | 185.2 | 267.9 | 324.5 |
| Income from Investment in P.N.G. .. .. .                  | 13.6     | 18.6  | 17.7  | 18.2  | 22.4  |
| Total Payments on Current Account .. .. .                 | 171.0    | 196.9 | 202.9 | 286.1 | 346.9 |
| <i>Capital Account—</i>                                   |          |       |       |       |       |
| Outflow of Investment .. .. .                             | 1.2      | 3.8   | 2.1   | 5.2   | n.a.  |
| Capital Remittances—                                      |          |       |       |       |       |
| Expatriate Savings Remittances .. .. .                    | 23.6     | 92.3  | 31.7  | 40.0  | n.a.  |
| Other Remittances .. .. .                                 | 12.1     | 9.1   | 25.0  | 38.0  | n.a.  |
| Balance on Capital Account .. .. .                        | 101.7    | 107.1 | 104.3 | 172.7 | 212.9 |
| Total .. .. .   | 138.6    | 149.3 | 163.1 | 255.9 | n.a.  |

|  | RECEIPTS |       |       |       |       |
|--|----------|-------|-------|-------|-------|
|  | 1967     | 1968  | 1969  | 1970p | 1971p |
| <i>Current Account—</i>                                      |          |       |       |       |       |
| Trade—   |          |       |       |       |       |
| Exports .. .. .  | 44.8     | 58.1  | 64.1  | 70.5  | 76.8  |
| Invisible Credits—   |          |       |       |       |       |
| Gold .. .. .   | ..       | ..    | 0.8   | 0.8   | 0.7   |
| Transportation .. .. .                                       | 5.0      | 6.5   | 7.4   | 9.3   | 11.3  |
| Travel .. .. .   | 7.9      | 11.1  | 10.5  | 14.1  | 17.8  |
| Miscellaneous .. .. .  | 3.6      | 4.2   | 3.1   | 3.8   | 5.9   |
| Total Receipts on Current Account .. .. .                    | 16.5     | 21.8  | 21.8  | 28.0  | 35.7  |
| Exports and Other Receipts for Goods .. .. .                 | 61.3     | 79.9  | 85.9  | 98.5  | 112.5 |
| Total .. .. .  | 61.3     | 79.9  | 85.9  | 98.5  | 112.5 |
| Income from Investment Overseas .. .. .                      | 8.0      | 9.9   | 12.7  | 14.1  | 21.5  |
| Deficit on Current Account .. .. .                           | 101.7    | 107.1 | 104.3 | 172.7 | 212.9 |
| Total Receipts on Current Account .. .. .                    | 171.0    | 196.9 | 202.9 | 286.1 | 346.9 |
| <i>Capital Account—</i>                                      |          |       |       |       |       |
| Inflow of Investment .. .. .                                 | 27.8     | 32.7  | 38.1  | 101.1 | n.a.  |
| Capital Remittances—   |          |       |       |       |       |
| Capital Transfers by Public Authorities and Missions .. .. . | 110.8    | 116.6 | 125.0 | 154.8 | n.a.  |
| Total .. .. .  | 138.6    | 149.3 | 163.1 | 255.9 | n.a.  |

Note: Figures for the year ended 30 June 1972 are not yet available.

## APPENDIX XXVII

### OVERSEAS TOURS

#### I. TOTAL DEPARTURES FOR YEAR ENDED 30 JUNE 1972

|   |    |    |    |    |    |    |    |    |    |       |
|---|----|----|----|----|----|----|----|----|----|-------|
| Permits                                     | .. | .. | .. | .. | .. | .. | .. | .. | .. | 988   |
| Exemptions                                  | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1,194 |
| Total Departures                            | .. | .. | .. | .. | .. | .. | .. | .. | .. | 2,182 |
| <i>Category</i>                             |    |    |    |    |    |    |    |    |    |       |
| Employment—                                 |    |    |    |    |    |    |    |    |    |       |
| Government Business                         | .. | .. | .. | .. | .. | .. | .. | .. | .. | 54    |
| Trade Exhibitions                           | .. | .. | .. | .. | .. | .. | .. | .. | .. | 9     |
| Private Business                            | .. | .. | .. | .. | .. | .. | .. | .. | .. | 35    |
| Seamen                                      | .. | .. | .. | .. | .. | .. | .. | .. | .. | 312   |
| Seminars, Conferences, Conventions          | .. | .. | .. | .. | .. | .. | .. | .. | .. | 102   |
| United Nations Matters                      | .. | .. | .. | .. | .. | .. | .. | .. | .. | 18    |
| Ordained Ministers                          | .. | .. | .. | .. | .. | .. | .. | .. | .. | 3     |
| Educational—                                |    |    |    |    |    |    |    |    |    |       |
| Students                                    | .. | .. | .. | .. | .. | .. | .. | .. | .. | 87    |
| Commonwealth Practical Training Scheme      | .. | .. | .. | .. | .. | .. | .. | .. | .. | 100   |
| Industrial Training                         | .. | .. | .. | .. | .. | .. | .. | .. | .. | 249   |
| Australian School of Pacific Administration | .. | .. | .. | .. | .. | .. | .. | .. | .. | 106   |
| Army Training                               | .. | .. | .. | .. | .. | .. | .. | .. | .. | 107   |
| Fellowships                                 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 8     |
| Post-Graduate Studies                       | .. | .. | .. | .. | .. | .. | .. | .. | .. | 8     |
| Group Educational Tours                     | .. | .. | .. | .. | .. | .. | .. | .. | .. | 99    |
| Recreational—                               |    |    |    |    |    |    |    |    |    |       |
| Vacations                                   | .. | .. | .. | .. | .. | .. | .. | .. | .. | 497   |
| Married to non-natives                      | .. | .. | .. | .. | .. | .. | .. | .. | .. | 60    |
| Sporting                                    | .. | .. | .. | .. | .. | .. | .. | .. | .. | 137   |
| Youth Camps                                 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 19    |
| Qantas Inaugural Flight to London           | .. | .. | .. | .. | .. | .. | .. | .. | .. | 23    |
| Cultural Competitions, Exchanges            | .. | .. | .. | .. | .. | .. | .. | .. | .. | 21    |
| Medical (Inc. Escorts)                      | .. | .. | .. | .. | .. | .. | .. | .. | .. | 39    |
| Members of the House of Assembly            | .. | .. | .. | .. | .. | .. | .. | .. | .. | 89    |
| Total Departures                            | .. | .. | .. | .. | .. | .. | .. | .. | .. | 2,182 |



# APPENDIX XXVIII

## PUBLICATIONS

### I. LIST OF PUBLICATIONS BY TYPE, LANGUAGE, CIRCULATION AND PUBLISHER

| Publication                  | Subject                       | Language           | Circulation | Publisher  |
|------------------------------|-------------------------------|--------------------|-------------|--|
| Non-Government periodicals—  |                               |                    |             |  |
| New Guinea Lutheran          | Religion .. ..                | English ..         | 3,103       | Lutheran Church  |
|                              |                               | Pidgin ..          | 3,328       |  |
|                              |                               | Kate ..            | 2,789       |  |
| Singaut .. ..                | Newspaper .. ..               | Pidgin ..          | 1,000       | Wabag Lutheran Church  |
|                              |                               | Enga ..            | 1,200       |  |
| Lalamana .. ..               | High School Journal ..        | English ..         | 300         | Asian Pacific Christian Mission                                |
| The School Anthology         | High School Journal ..        | English ..         | 300         | Asian Pacific Christian Mission                                |
| Torch .. ..                  | General .. ..                 | English ..         | 650         | Asian Pacific Christian Mission                                |
| Tutuli .. ..                 | Newspaper .. ..               | Gogodala ..        | 950         | Asian Pacific Christian Mission                                |
| St Mary's Parish Paper       | Religion .. ..                | English ..         | 200         | Lae Catholic Mission   |
| Tapowaroro Yeterina          | Religion .. ..                | Dobuon ..          | 1,200       | Samarai United Church  |
| Soim Gutpela Rot ..          | Book on Religion .. ..        | Pidgin ..          | 4,000       | South Seas Evangelical Mission—Wewak                           |
| Yu Bin Kisim Mi I            | Book on Religion .. ..        | Pidgin ..          | 15,000      | South Seas Evangelical Mission—Wewak                           |
| Kambek Antap                 |                               |                    |             |  |
| Nilai Ra Dovot ..            | Religion and Church News      | Kuanua and Pidgin  | 6,000       | Rabaul United Church   |
| War Cry .. ..                | Religion .. ..                | English ..         | 400         | Salvation Army   |
| The Young Soldier ..         | Religion and Youth Activities | English ..         | 500         | Salvation Army   |
| M.V. Programme Guide         | Religion and Youth Programme  | English ..         | 500         | Seventh Day Adventist  |
| Compass .. ..                | Religion .. ..                | English ..         | 385         | Seventh Day Adventist  |
| Island Worker .. ..          | Religion .. ..                | English ..         | 800         | Seventh Day Adventist  |
| M.V. Week of Prayer          | Religion .. ..                | English ..         | 660         | Seventh Day Adventist  |
| Harim .. ..                  | Religion .. ..                | Pidgin ..          | ..          | Missionary Association   |
| Missionary News ..           | Mission Work .. ..            | English ..         | 5,500       | Australian Churches of Christ                                  |
| Kumul .. ..                  | Police News .. ..             | English and Pidgin | 5,000       | Police Association   |
| P.S.A. Bulletin .. ..        | Public Service .. ..          | English and Pidgin | 15,000      | Public Service Association                                     |
| Post-Courier .. ..           | Newspaper .. ..               | English ..         | 17,000      | ..   |
| Focus .. ..                  | Current Affairs .. ..         | English and Pidgin | 10,000      | ..   |
| Kaunsila .. ..               | Local Government Affairs      | Pidgin ..          | 5,000       | ..   |
| Inside New Guinea            | Newsletter .. ..              | English ..         | 600         | ..   |
| Teacher .. ..                | Teacher's News .. ..          | English ..         | 10,000      | Teachers Association   |
| Councillor .. ..             | Local Government .. ..        | English ..         | 5,000       | ..   |
| Wantok .. ..                 | General .. ..                 | Pidgin ..          | 8,000       | ..   |
| Bougainville News ..         | General .. ..                 | Pidgin and English | 8,000       | ..   |
| News Notes .. ..             | Tourism .. ..                 | English ..         | 2,000       | Tourist Board  |
| Information Brochure         | Tourism .. ..                 | English ..         | 30,000      | Tourist Board  |
| U.P.N.G. News .. ..          | University News—Developments  | English ..         | 1,500       | University of Papua New Guinea                                 |
| U.P.N.G. Calendar ..         | Calendar of Events ..         | English ..         | 3,000       | University of Papua New Guinea                                 |
| University Events this Week  | University Events ..          | English ..         | 5,000       | University of Papua New Guinea                                 |
| Kovave .. ..                 | Literature .. ..              | English ..         | ..          | N.G. Cultural Society University                               |
| Nobnob News .. ..            | Literature .. ..              | English and Pidgin | ..          | Creative Training Centres, Madang                              |
| Read .. ..                   | Literacy and Literature       | English ..         | ..          | Summer Institute of Linguistics                                |
| Precept .. ..                | Writing Methods .. ..         | English ..         | ..          | Christian Writer's Association, Madang (published irregularly) |
| Pangu Nius .. ..             | Party Newspaper .. ..         | English ..         | ..          | Pangu Pati, Port Moresby                                       |
| United News .. ..            | Party Newspaper .. ..         | English ..         | ..          | United Party, Port Moresby                                     |
| Journal of P.N.G. Society    | History-Culture Development   | English ..         | ..          | P.N.G. Society in Association with the University              |
| The Drum .. ..               | Newsletter .. ..              | English ..         | ..          | Girl Guides Association  |
| Bougainville Copper Bulletin | Newsletter .. ..              | English ..         | ..          | Bougainville Copper Pty Ltd                                    |

APPENDIX XXVIII—continued

I. LIST OF PUBLICATIONS BY TYPE, LANGUAGE, CIRCULATION AND PUBLISHER—continued

| Publication                      | Subject   | Language                  | Circulation | Publisher   |
|----------------------------------|---|---------------------------|-------------|---|
| Man in N.G. ..                   | Newsletter .. ..  | English .. ..             | .. ..       | Anthropology Department, University                                 |
| Nilaidat .. ..                   | Newsheet .. ..  | English .. ..             | .. ..       | Students Association, University                                    |
| New Guinea ..                    | Social Services ..                                      | English .. ..             | .. ..       | Australian National University                                      |
| Research Bulletins ..            | Research .. ..  | .. ..                     | .. ..       | Research Unit, Port Moresby   |
| Government publications—         |   |                           |             |   |
| Kibi .. ..                       | Trade and Industry ..                                   | English .. ..             | 2,000       | Trade and Industry  |
| P.W.D. Newsletter ..             | Newsletter .. ..  | English .. ..             | 2,000       | Public Works Department   |
| Bisnis .. ..                     | Newsletter .. ..  | English and Pidgin        | 2,000       | Department of Business Development                                  |
| Our News .. ..                   | General Information ..                                  | English .. ..             | 23,500      | Department of Information and Extension services                    |
| Nuis Bilong Yumi ..              | General Information ..                                  | Pidgin .. ..              | 8,500       | Department of Information and Extension services                    |
| Annual Report ..                 | Departmental Activities                                 | English .. ..             | 1,500       | Department of Public Works  |
| Research Bulletin ..             | Building Research ..                                    | English .. ..             | 1,500       | Department of Public Works  |
| Annual Report ..                 | Departmental Activities                                 | English .. ..             | 1,500       | Department of Public Health   |
| Woodnews .. ..                   | Wood and Timber ..                                      | English .. ..             | 300         | Department of Forestry  |
| Forkol .. ..                     | Forestry College Journal                                | English .. ..             | 100         | Department of Forestry  |
| Agricultural Bulletins           | Various Subjects ..                                     | English .. ..             | .. ..       | Department of Agriculture, Stock and Fisheries                      |
| Agricultural Journal             | Tropical Agriculture ..                                 | English .. ..             | 2,000       | Department of Agriculture, Stock and Fisheries                      |
| Harvest .. ..                    | Tropical Agriculture Livestock, Fisheries and Wild Life | English .. ..             | 2,000       | Department of Agriculture, Stock and Fisheries                      |
| Statistical Bulletins ..         | Tropical Agriculture                                    | English .. ..             | .. ..       | Bureau of Statistics  |
| House of Assembly News           | Proceedings of the House of Assembly                    | English .. ..             | .. ..       | Department of Information and Extension Services                    |
| Tok Tok Bilong Haus ov Assembli  | Proceedings of the House of Assembly                    | Pidgin .. ..              | .. ..       | Department of Information and Extension Services                    |
| Lower School Paper               | Primary School Standards 3 and 4                        | English .. ..             | 74,000      | Department of Education   |
| Upper School Paper               | Primary School Standards 5 and 6                        | English .. ..             | 54,000      | Department of Education   |
| Our World .. ..                  | Primary School Social Studies                           | English .. ..             | 56,000      | Department of Education   |
| Education Gazette ..             | Teacher Information ..                                  | English .. ..             | 5,600       | Department of Education   |
| Journal of Education             | Teacher Information ..                                  | English .. ..             | 4,000       | Department of Education   |
| News Review .. ..                | Secondary Current Affairs Bulletin                      | English .. ..             | 6,000       | Department of Education   |
| Teacher Information Booklets     | Developments and Policy                                 | English .. ..             | 2,000       | Department of Education   |
| High Schools of Papua New Guinea | Secondary School Information                            | English .. ..             | 1,000       | Department of Education   |
| Papua New Guinea Writing         | Literature .. ..  | English/Pidgin, Hiri/Motu | .. ..       | Literature Bureau, Department of Information and Extension Services |
| New Guinea Bulletin              | Newsheet .. ..  | English .. ..             | .. ..       | Highlands Farmers & Settlers' Association, Goroka                   |

Note: This list is not exhaustive and advice of further Papua New Guinean publications will be gratefully received.

## APPENDIX XXIX

### INDEX: TRUSTEESHIP COUNCIL QUESTIONNAIRE

REFERENCES TO QUESTIONS IN THE QUESTIONNAIRE OF THE TRUSTEESHIP COUNCIL (DOCUMENT T/1010) AND TO QUESTIONS ADDED AT THE TWENTY-SECOND SESSION OF THE COUNCIL (DOCUMENT T/1010/ADD. 1). THE LATTER HAVE BEEN INDICATED BY THE LETTERS 'a' AND 'b'

| Question | Page         | Question | Page      | Question | Page          | Question  | Page     |
|----------|--------------|----------|-----------|----------|---------------|-----------|----------|
| 1 ..     | 1, 2         | 55..     | 14,       | 104..    | 368-374       | 161..     |          |
| 2 ..     | 2, 3, 210    | 56..     | 80-85,    | 105..    | 368           | 162..     | 218-219  |
| 3 ..     |              | 57..     | 251,      | 106..    |               | 163..     |          |
| 4 ..     | 3-6          | 57a ..   | 318-321   | 107..    | 163-166       | 164..     |          |
| 5 ..     | 6, 7         | 58..     |           | 108..    |               | 164a      |          |
| 6 ..     | 7            | 58a ..   | 86-96     | 108a ..  |               | 165..     |          |
| 7 ..     |              | 59..     | 248-251   |          | 109..         | 166, 167, | 220-221  |
| 8 ..     | 7-10         | 60..     |           | 110..    | 354-356       | 167..     |          |
| 9 ..     |              | 62..     |           | 96-100,  | 111..         | 167-204   | 168..    |
| 10 ..    | 10, 11       |          | 248,      | 112..    | 170-174       | 169..     | 221-224, |
| 11 ..    | 11, 12       |          | 322-324   | 113..    | 186-188       | 170..     | 227      |
| 11a ..   |              | 63..     |           | 100-102, | 114..         | 182-184,  | 224-227, |
| 12 ..    | 12-14        |          | 250       |          | 194, 198      | 171..     |          |
| 13 ..    | 14-15        | 64..     |           | 115..    | 137           | 172..     |          |
| 14 ..    |              | 65..     | 103-108,  | 116..    | 172-173,      | 173..     |          |
| 15 ..    |              | 66..     | 251,      |          | 379           | 174..     | 228-229  |
| 16 ..    | 18-39        | 66a ..   | 326, 327  | 117..    | 378-384       | 175..     |          |
| 17 ..    | 48-50        | 67..     | 108-111,  | 119..    | 188-190,      | 176..     |          |
| 18 ..    | 242-244      | 68..     | 249, 252, |          | 404-412       | 177..     |          |
| 19 ..    |              | 69..     | 328-330   | 122..    | 167-170       | 178..     |          |
| 20 ..    |              | 70..     |           | 123..    |               | 179..     |          |
| 21 ..    | 32-39, 246   | 71..     |           | 124..    |               | 180..     |          |
| 22 ..    | 31, 39-48    | 72..     | 112-117,  | 125..    | 190-191       | 181..     | 230-241  |
|          | 147, 148,    | 73..     | 251       | 126..    |               | 182..     |          |
| 22a ..   | 210, 247     | 73a ..   |           | 127..    |               | 183..     |          |
| 23 ..    | 31, 48-50    | 74..     |           | 128..    | 385-400       | 184..     |          |
| 24 ..    | 50, 51, 244, | 75..     |           | 129..    |               | 185..     |          |
|          | 245          | 76..     | 117-126,  | 130..    | 192, 194-196, | 186..     |          |
| 25 ..    |              | 77..     | 335-353   |          | 198           | 187..     | 237,     |
| 26 ..    | 50-56,       | 78..     | 129-137   | 131..    | 181-182,      | 188..     | 451-452  |
| 27 ..    | 245          | 79..     |           | 132..    | 187           | 189..     | 241-255  |
| 28 ..    |              | 80..     | 138       | 133..    |               | 190..     | 255-258  |
| 29 ..    |              | 81..     |           | 134..    | 199-201       |           |          |
| 30 ..    |              | 82..     |           | 135..    |               |           |          |
| 31 ..    |              | 83..     |           | 136..    |               |           |          |
| 32 ..    |              | 84..     |           | 137..    | 204, 205      |           |          |
| 33 ..    | 57-61        | 85..     | 139, 140  | 138..    |               |           |          |
| 34 ..    | 76           | 86..     |           | 139..    | 205           |           |          |
| 35 ..    | 294-304      | 87..     |           | 140..    | 205, 206      |           |          |
| 35a ..   |              | 88..     |           | 141..    |               |           |          |
| 36 ..    |              | 89..     |           | 142..    | 206-212,      |           |          |
| 37 ..    |              | 90..     |           |          | 413           |           |          |
| 37a ..   |              | 91..     |           | 143..    | 212           |           |          |
| 38 ..    | 61-63        | 92..     |           | 144..    |               |           |          |
| 39 ..    | 63-71        | 93..     |           | 145..    |               |           |          |
| 41 ..    |              | 94..     | 142-144   | 146..    | 212-216,      |           |          |
| 42 ..    | 66-71        | 95..     |           | 147..    | 414           |           |          |
| 43 ..    |              | 96..     |           | 148..    |               |           |          |
| 44 ..    | 63-65,       | 97..     |           | 149..    |               |           |          |
|          | 331-334      | 98 ..    | 145-149,  | 150..    |               |           |          |
|          | 66-70        |          | 156,      | 151..    |               |           |          |
| 45 ..    | 18           |          | 158-161,  | 152..    |               |           |          |
| 46 ..    | 63, 70, 71   | 98a ..   | 162, 163  | 153..    |               |           |          |
| 47 ..    |              | 99..     | 162       | 154..    |               |           |          |
| 48 ..    | 71           | 100..    | 162, 163  | 155..    | 216-218       |           |          |
| 49 ..    | 70-79, 249   | 101..    | 149-153   | 156..    |               |           |          |
| 50 ..    |              | 102..    | 145, 146  | 157..    |               |           |          |
| 51 ..    |              |          | 147, 162, | 157a ..  |               |           |          |
| 52 ..    | 74-79        |          | 163       | 158..    |               |           |          |
| 53 ..    |              | 103..    | 149-151   | 159..    |               |           |          |
| 54 ..    |              | 103a ..  | 375       | 160..    |               |           |          |