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14-18 August 1979 Bangkok

E/ESCAP/DP/EDRS/16 ENGLISH

United Nations
Economic and Social Commission
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ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC

UNITED NATIONS ENVIRONMENT PROGRAMME

Symbol number: DP/EDRS/16

Distribution: Limited

9 July 1979

ORIGINAL: ENGLISH

ENVIRONMENT AND DEVELOPMENT:
REGIONAL SEMINAR ON ALTERNATIVE PATTERNS OF DEVELOPMENT
AND LIFE-STYLES IN ASIA AND THE PACIFIC

METHODOLOGICAL/INSTITUTIONAL PAPER

THE INCORPORATION OF ENVIRONMENTAL CONSIDERATIONS IN PLANNING IN PAPUA NEW GUINEA

BY

JOHN E. LOW

This paper was prepared by John E. Low, A/First Assistant Director (Environment), Office of Environment and Conservation, Port Moresby. The views expressed in it are those of the author and do not necessarily reflect those of the United Nations or the Government of Papua New Guinea.

ABSTRACT

This paper reviews the broad administrative framework of the Papua New Guinea Government, particularly with respect to planning, and outlines the main features of recent environmental legislation. The Environmental Planning Act is designed to infuse environmental considerations into development proposals at the earliest planning stage, while various other legislative instruments are available to serve the purposes of environmental management. Another tool is the financial one, since public finance is directed to give priority to the National Public Expenditure Plan within which environmental protection is one of the nine strategic objectives. There is also quite wide scope for public participation in decision-making at the local level.

Traditionally, central planning in Papua New Guinea scarcely recognized the "conservation ethic" and widespread administrative and legislative changes represent a clear break with the past. Since the changes are of recent date, it is too early to tell how successful the country has been in incorporating the environmental dimension into planning but clearly an important problem is having to change the entrenched attitudes that government bodies have retained since the pre-independence era.

Other problem areas include a lack of inter-departmental co-ordination, and skilled manpower, in the administration; an absence of information on the environment; the prevalence of wasteful traditional land-use practices; and increasing population pressures.

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, I. GENERAL

A. HISTORY

Papua New Guinea became an independent nation in September, 1975, after 95 years of foreign administration. Through most of its recent history it was administered by Australia and was comprised of the Australian territory of Papua and the United Nations Trust territory of New Guinea. The country was generally neglected, from a development point of view, for most of its history except for relatively brief periods during the Second World War, recently in the years leading to independence, and in certain localized areas during various gold rushes in the 1930s and earlier.

B. GEOGRAPHY

The country is of recent geological origin and comprises the eastern half of the island of New Guinea and several large and small islands off the eastern and northern coasts. The lowlands consist generally of large areas of tropical rainforests. The highlands, extending to 3,700 metres in the rugged interior of the main island, are formed of large areas of montane forest and extensive areas of grassland. The majority of the country's population lives in the highland areas between 1,000 and 2,000 metres. Large areas of swampland and mangrove form much of the southern coast of the main island. Soils vary widely in fertility throughout the country.

C. ETHNOLOGY

The country, populated by Melanesian people who are divided into over 700 language groups, is the most linguistically complex area in the world. Social identify is generally encompassed by the clan grouping which normally consists of several villages or hamlets.

The vast majority of the population continue to live at a subsistence level. The urban population remains low, but, as in many other developing areas of the world, is growing at a very rapid rate. The population is approaching 3 million, although this is still comparatively small in relation to total land area, overpopulation in relation to available resources has become critical in several areas of the country, notably the central highlands.

D. ECONOMY

The cash economy is making significant inroads in the country and the major foreign income earners are copper, coffee, copra and cocoa. A major copper mining project on the island of Borgainville provides the main internal source of government revenue. Village and plantation grown coffee in the highlands provides the major source of income for that area. Coastal plantations grow most of the copra and cocoa. Forestry and fisheries also play

smaller roles in the country's economy. Economic assistance in the form of untied grants from Australia is a very significant element in meeting the revenue needs of the government in Papua New Guinea. However, this will be decreasing steadily in the coming years.

E. CLIMATE

High annual rainfall is a major climatic feature of Papua New Guinea. Temperature range is much the same year round, with generally cooler temperatures in the highlands. Lowland temperatures range from highs of $28-34^{\circ}$ C to lows of $20-25^{\circ}$ C.

II. CONSTITUTIONAL BASIS FOR ENVIRONMENTAL PROTECTION

The Constitution of Papua New Guinea places supreme emphasis on the need for environmental management and conservation. The Fourth of the Five National Goals of the Constitution reads:

Natural Resources and Environment:

"We declare our fourth goal to be for Papua New Guinea's natural resources and environment to be conserved and used for the collective benefit of us all and be replenished for the benefit of future generations.

"We accordingly call for:

- (a) wise use to be made of our natural resources and the environment in and on the land or seabed, in the sea, under the land, and in the air, in the interests of our development and in trust for future generations; and
- (b) the conservation and replenishment for the benefit of ourselves and posterity, of the environment and its sacred, scenic, and historical qualities; and
- (c) all necessary steps to be taken to give adequate protection to our valued birds, animals, fish, insects, plants and trees."

In addition, the Fifth of the Five National Goals calls for the achievement of development "primarily through the use of Papua New Guinean forms of social, political and economic organization". The elaboration of this goal states that its intention is to maintain the viability of traditional villages and community life through the promotion of smaller scale development activities.

The Fifth National Goal calls for:

- "1. a fundamental re-prientation of our attitudes and the institutions of government, commerce, education and religion towards Papua New Guinea forms of participation, consultation, and consensus, and a continuous renewal of the responsiveness of these institutions to the needs and attitudes of the People; and
- "2. particular emphasis in our economic development to be placed on small-scale artisan, service and business activity; and
- "3. recognition that the cultural, commercial and ethnic diversity of our people is a positive strength, and for the fostering of a respect for, and appreciation of, traditional ways of life and culture, including language, in all their richness and variety, as well as for a willingness to apply these ways dynamically and creatively for the tasks of development; and
- "4. traditional villages and communities to remain as viable units of Papua New Guinean society, and for active steps to be taken to improve their cultural, social, economic and ethical quality."

The impetus for the selection of these National Goals and Directive Principles, which were chosen after a very lengthy constitutional planning process, may be traced to certain development activities which took place in the final years before independence, which caused divisions and strife on a scale rarely seen throughout the colonial history of the country. The most important of these was the development of the Bougainville copper mine on the island of that name during the late 1960s.

Papua New Guinea's mining legislation at the time looked much like that of other Commonwealth countries and displayed much the same lack of appreciation for environmental considerations, quite unlike the land legislation policy which was much more understanding of the problems associated with development of lands and waters from which people must wrest a subsistence lifestyle. With the exception of the Wau goldfields in the 1930s where the same problems arose on a lesser scale, this particular legislation had never to deal with the problems created by large modern open pit mining techniques. At the same time, the Australian

expatriate administration, which was quite anxious to promote some large scale economic activities before independence, was assuming a "develop at any cost" stance. The result was a clash involving land rights, royalties, the destruction of a quite productive subsistence lifestyle, serious social impacts, environmental pollution and, perhaps most importantly, the creation of an incipient separatist movement which threatened to split the country until the creation of a federal government system in 1976. Papua New Guinea's present system of provincial government may be seen to have arisen largely from the Bougainville situation.

Another development which took place at the same time and by the same administration was the Gogol timber chip-milling project near Madang on the North Coast.

This project did not cause the initial strife that appeared at Bougainville, largely because there were fewer people involved, and there were promises of handsome future royalties, but the end result has been more environmentally devastating. Today, although the plant remains in operation, the property owners, the government, and, apparently, the company itself are gaining minimal profits from it. The only visible benefit appears to be some employment at the mill and in the forest works for people in Madang. Company tax was not paid until 1978. Import taxes,

/royalties

Lose Hannett and Havini, Bougainville Nationalism: Aspects of Unity and Discord (Bougainville Special Publication, Christ Church, 1974), p. 3. On p. 11 it is stated that: "with the development of the copper project from the late sixties has come radical socio-economic change and a clear perspective of an unsympathetic colonial administration. Access to power, status and material resources; participation in decision making and development planning; inequalities in education and employment; and the question of land rights have all been heightened by the arrival of Bougainville Copper". "A host of social problems associated with the project, such as the influx of outsiders and other social changes have encouraged nationalist sentiments. There are parallels here with the secessionist movement in Katanga where there was a defensive reaction to the growing ascendency of migrants in the mine areas, many of whom were unskilled and unemployed".

^{2/} See L. J. Webb, <u>Ecological Considerations in the Use of Tropical Lowland Rainforest as a Source of Pulpwood: Example of the Madang Area</u> (Papua New Guinea, Office of Environment and Conservation, Waigani, 1975), which provides analysis of the problems arising from this project.

royalties to government, wharf duties and other revenue derived from the project do not appear to have compensated for the government expenditures on the project. The company, a minor subsidiary of a large multinational corporation, may be able to conceal profits through methods that a country with limited resources to check accounting practices could never hope to monitor effectively.

The Office of Environment has commissioned a study on the social impact of this project, the results of which should be available shortly.

These two pre-independence developments, which loom large in a country the size of Papua New Guinea, plus other smaller ones, have left firm imprints on Papua New Guinea's development philosophy and Constitutional Directives. There is a clear understanding that development can be a two edged sword if not properly managed, particularly from an environmental perspective.

In addition, the eight political aims of the ruling PANGU Party, although none deal specifically with environmental concerns, are intended to guide economic activity in a manner similar to the National Goals and Directive Principles (see annex II).

These two documents provide the guiding principles in Papua New Guinea's planning processes. However, certain inconsistences between them lie at the root of some continuing problems in environmental management in Papua New Guinea.

III. ADMINISTRATIVE FRAMEWORK OF THE PAPUA NEW GUINEA GOVERNMENT

Papua New Guinea has a federal system of government and serious efforts are now being made through provincial governments to involve village and local areas more closely in decision making. The intention of the provincial planning process is to ensure that local areas will have more control over development that directly affects them and also to ensure grassroots capacity to plan within and for provinces. Provincial planning capacities are now being greatly strengthened for this purpose. Some twenty provincial governments are now being established to give local areas sole control over certain minor functions, and concurrent roles with the federal government in a significant number of other areas, including environment, conservation and wildlife matters. National government legislation will maintain primacy however.

The decentralization effort has been considered a necessity in a country where the ability of village people to participate in decision-making at the national level has obvious limitations and where a tradition of foreign administration left the impression that "gavaman" meant a one way flow of edicts or information from the capital, Port Moresby, to the outlying areas. Although Papua New Guineans have had a long tradition of democracy within their own clan sections and villages, their ability to communicate effectively to a national forum is greatly limited. Also the myriad number of clan groupings in the country has made consensus building a daunting task. Provincial government is seen as the intermediate forum which could improve communication in both directions and concurrently improve environmental planning.

Papua New Guinea is a constitutional monarchy on the Westminister model and has a form of government common to most nations in the British Commonwealth. Included among the cabinet portfolios is one for a Minister for Environment and Conservation and under this Ministry, the Office of Environment and Conservation has prime responsibility for the development of policy in the environmental field. The Minister is also responsible for a statutory authority, the National Parks Board, and the Wildlife Division of the Department of Lands, and Environment.

The Office of Environment and Conservation, established in April, 1974, is a relatively new body, as it is in most countries. It is functionally part of the Department of Lands and Environment which is responsible to two Ministers, one for Lands and one for Environment, although it is expected that a reorganization in the near future will result in the creation of two separate departments.

The constitutional emphasis on environmental protection and conservation has probably been the most important element in the rapid rise in importance of the environmental factor in development planning and, by the same token, the growth of the administrative arm, i.e. the Office of Environment and Conservation.

The land tenure system in Papua New Guinea has evolved in a manner quite amenable to environmental management techniques. The evolution of this approach has resulted principally from the strong ties which Papua New Guineans have traditionally had with the land. Unlike other former colonies, forceful expropriation was (with some early exceptions) never a /practice

^{3/} See C. de Laet, <u>Environmental Management in Papua New Guinea</u> in J. H. Winslow, ed., <u>the Melanesian Environment</u>, (Australian National University Press, Canberra, 1977) p. 306.

practice of the administration and, having had problems in other colonies as an example (combined, perhaps, with a lack of interest in Australia to colonize the new territory), a new system evolved which has given the government large control over land to be used for development and also left by far the largest bulk of land in customary hands.

The 1976 White Paper on the National Development Strategy has made a virtue of necessity by noting the need to continue to promote development on customary lands via the Fifth National Goal and Directive Principle. However, many government agencies have continued to promote development which presupposes foreign models of land ownership which are generally unacceptable to customary landowners.

Lands which are to be used for conventional development may be leased by the customary group to the government who in turn leases it to the developer. This allows for environmental conditions to be attached to the lease and has been used in several instances. Before the passage of legislation, which will be discussed in a later section, the Office of Environment used this method to build environmental conditions into some development projects. Thus, for example, conditions were attached to the land lease for the Madang chipping mill requiring the installation of certain pollution abatement and monitoring equipment. The enforcement of such conditions has, however, presented some problems. The major drawback to the utilization of the lease system requiring enforcement of environmental conditions, is the lack of flexibility. If there is non-compliance, then the only penalty is not to renew the lease which in the case of a large industrial facility, is usually an inappropriate response.

Other departments and agencies that have environmental responsibilities include the Department of Transport (marine pollution from ships); Department of Health (water quality); Bureau of Water Resources (water quality and quantity); Department of Minerals and Energy (compensation for mining damages); Police Department (auto emissions and noise); Department of Labour and Industry (in-plant pollution); Office of Forests (forest environmental management); Department of Lands (land use planning); City Councils (anti-noise bye-laws).

The most important body co-ordinating development planning within the administration is the National Planning Committee. This Committee, acting through the National Planning Office, is responsible for distilling the National Goals and Directive Principles and the Eight Aims into a format against which decisions on future government expenditure are made. This has been accomplished through a National Development Strategy and subsequent

strategic objectives for national expenditure outlined in the National Public Expenditure Plan. One of these nine objectives is environmental protection. The intention is that all new revenue, above recurrent expenditures will be allocated to departments according to their ability to formulate projects according to these strategic objectives. This is the only manner by which government departments may obtain additional revenues, and is generally seen as an effective method to redirect government departments which all too often continue to operate on priorities from the colonial era.

In the past the screening of these projects has not always been sufficiently rigorous from the environmental point of view, often because some of the strategic objectives are incompatible in themselves. However for 1980 NPEP projects, a representative of the Office of Environment did for the first time participate in the initial screening committee and it has been determined that for projects with environmental implications, 5 per cent of the feasibility budget will be allocated to environmental studies and an environmental plan will be required from these proponents.

The intrusion of the environmental planning process at this stage has had two advantages. The first is that it is a relatively painless point at which to inject the requirement, since it is at little more than the "click of the idea light-bulb" stage and the second is that the funds are quickly allocated for the project and attributable as a cost of that particular project, rather than for the general environmental protection budget.

The NPEP process is yet in its infancy, but once some of the screening problems are removed and a means of dealing with the inconsistencies among the strategic objectives is established, the National Public Expenditure Plan may be seen to be another effective means of achieving environmentally sound planning.

Another potential tool is the National Investment and Development Authority (NIDA) which will be examined in a later section.

IV. RECENT LEGISLATION IN THE ENVIRONMENTAL FIELD

In August 1978, the National Parliament passed three Acts relating to environment and conservation.

The most important of these from the environmental planning perspective is the Environmental Planning Act.

This Act provides for an environmental planning procedure to be invoked by the Minister for Environment where he feels that adequate consideration has not been given to the environmental effects of certain development projects in the early planning phases. It provides for the required submission of an environmental plan by the project proponent and a procedure by which the plan will be reviewed by the Office of Environment, other authorities, and the public with final submission to the National Executive Council for decision along with economic and other considerations. The aim of the Act is to ensure that development is consistent with the National Goals and Directive Principles of the constitution.

The Act provides for the establishment of general guidelines for the preparation of plans set according to criteria outlined in the Act. These criteria are:

- (a) the long-term and short-term objectives of the proposal or project;
- (b) the proposal or project and alternatives to that proposal or project including alternative sites;
- (c) alternative methods of carrying out the proposal or project and recommendations for a particular method;
- (d) the environment that may reasonably be expected to be affected directly or indirectly, immediately or in the long-term;
- (e) the environmental changes that may result from carrying out the proposal or project;
- (f) the actions proposed to prevent or mitigate any adverse environmental changes that may occur as a result of carrying out a proposal or project;
 - (g) the projected utilization of natural resources and energy;
 - (h) the projected use and discharge of environmental contaminants;
- (i) the costs and advantages that may accrue from a proposal or project;

- (j) any permanent change in the physical, biological, social or cultural characteristics of the affected environment or in the possible future use of that environment;
- (k) any matters that are necessary or that, in the opinion of the proponent or the Director, are relevant to the environmental plan.

It is noteworthy that in addition to straight environmental criteria, examination of alternative methods of carrying out the proposed objective of the development is considered an important element of the plan.

This would mean, for example, that in respect to a proposal for a sugar mill, that the simpler Khandasari process would have to be examined, as well as higher technology methods.

Besides the general guidelines, there is provision for specific guidelines to be established for certain industries.

Most importantly, as an inducement for project proponents to undertake environmental planning at an early stage and to incorporate it into their over-all planning, there is provision for a voluntary environmental plan submission. If a voluntary plan is submitted before the Minister has issued a requisition, it is at the Minister's discretion how much of the procedure outlined in the Act will need to be followed before an approval is given.

The most important teeth in the Act include Section 8, which provides for a restraint on approvals by other agencies or departments before the environmental plan has been completed and assessed. Also, Section 19 provides for a fine of up to 40,000 kina (#US 68,000) for proceeding with a prohibited project or in violation of one of the conditions of an approved project. Compensation may not be claimed for a project that has been prohibited.

Departments and agencies of government have a duty to advise the Minister of any proposal where there may be significant environmental implications. There is also a provision for Boards of Enquiry to be established where the National Executive Council is of the opinion that further investigation is required.

This Act has not yet been gazetted pending the publication of general guidelines which are now being prepared. However, several projects will be required to comply with the provisions of the Act as terms of an agreement between the State and foreign investors.

These include a proposal for a large integrated sugar industry involving the growing and milling of sugar, a fish processing and canning operation and a proposal for a large timber chip-milling operation on New Britain.

It is expected that the environmental planning procedure will be applied automatically to any large development proposal involving natural resource extraction. There has previously been application of the environmental planning techniques in connection with a proposed major copper mining project in the western interior and with a projected hydroelectric installation on the Purari River. To date there has not been any application of environmental planning to general development policies but this is envisaged. For example, the methods and criteria with which the Department of Transport builds airports or roads could be examined from an environmental point of view and the environmental planning process applied to these policies. On completion and after incorporation of environmentally sound policies, the environmental planning process in the future would then concern itself only with location and other specific aspects of future road or airport facilities.

The purpose of the Environmental Planning Act, in many ways like the National Public Expenditure Plan, is to redirect government departments from their traditional and often outmoded concepts of development in order to infuse environmental considerations at the earliest planning stages in development proposals. There is no doubt that initially many proponents will view the environmental planning process as a bureaucratic hurdle which, once jumped, will allow them to continue with their preconceived notion of how a particular project should be planned and developed and it will undoubtedly only be after several experiences with the full planning programme that some departments will find that proper planning using the voluntary plan provisions, and consultation with the appropriate government agencies and people affected is more worthwhile in the long run.

Some departments are already beginning to see the advantages of undertaking a voluntary environmental plan, and even though this is done undoubtedly to avoid the full environmental planning route, it will help significantly in encouraging a reorientation of views on the need for environmental planning and the desirability of undertaking it at an early stage. There is a new willingness to undertake this consultation earlier instead of circumventing the Office of Environment and Conservation, as would often have taken place before the legislation was passed. Once the new legislation is gazetted and guidelines have been prepared, the trend in this direction will hopefully become even more apparent.

At the same time that the Environmental Planning Act was passed by Parliament two other statutes were enacted, the Environmental Contaminants Act and the Conservation Areas Act.

The Environmental Contaminants Act provides for licensing processes for the effluents from manufacturing and trade premises, much like environmental protection acts in other countries. It also provides for a permit system to cover the import, sale and manufacture of environmentally hazardous substances, such as pesticides. In addition to these, there are provisions to cover littering, broken glass, and noise.

This Act will be tied in with the Environmental Planning Act. Where conditions have been approved according to that Act, a proponent will be issued an appropriate licence under the Environmental Contaminants Act.

Regulations and standards are now in the process of being drafted so that this Act may come into effect in the near future. Although Papua New Guinea does not have serious problems with industrial effluents at the moment, with the exception of the Bougainville copper mine which is out of the scope of this Act, there is a very real concern that the generally high standard of Papua New Guinea's air, water and land must be maintained, especially because of the close relationship which most subsistence level Papua New Guineans have to their land and seas. It is expected that the initial focus of the Act will be on the pesticide problem which is becoming of increasing importance because of a dearth of previous legislation to control their use.

The Conservation Areas Act is intended to provide for the control of uses of certain land which is determined to have "particular biológical, topographical, geological, historic, scientific or social importance". The Act will essentially place the onus for development on those who are proposing changes from the existing land uses. The mechanism to achieve this will be the requirement that once a conservation area has been established a proponent who wishes to change the existing land use must apply through the Minister for permission to do so. Heavy penalties of the same magnitude as those prescribed by the Environmental Planning Act, are provided where this requirement has been ignored. Before a conservation area is established there are extensive discussions with local landowners, government agencies and others to determine whether it should be established and if so, what form it should take. It is hoped that much of the initiative for the creation of the conservation area will come from those who live within the bounds of the area.

Much of the control over the land use within the conservation area will be vested with those who live in the area, through management committees which will recommend rules for the area through the Minister.

A highly successful precendent to this kind of legislation has already been established in the Wildlife Management Area section of the Fauna Protection Act which has been quite successful in encouraging local groups to undertake responsibility for the protection of their wildlife resources through the provisions of the Act. It is hoped that several of these areas may be transformed to Conservation Areas.

Papua New Guinea has always had national parks legislation, but the land tenure provisions of this Act have always hindered the effective creation of such parks because of Papua New Guineans' reluctance to lease their lands to the government. It is hoped that the new legislation will help overcome this handicap to conservational management.

There is also provision in the new legislation for the creation of a Conservation Council to advise the Minister and to raise issues to the public and government concerning the future of Papua New Guinea's environmental and conservation policies.

It is expected that these three Acts will assist Papua New Guinea on the road to implementation of the Fourth National Goal and Directive Principle. The major problem for the near future will be oversight and non-enforcement. The administrative infrastructure required to enforce the Environmental Contaminants Act could be considerable and it is expected that the inspectorate of the Health Department will be called on to enforce much of this legislation for the near future. The problem of untrained manpower is a very considerable one for Papua New Guinea and the question of enforcement of sophisticated air and water quality standards plus the necessary backup laboratory facilities for monitoring is disconcerting. Thus much of the work to be undertaken by the Offices of Environment will revolve around the establishment of standards and ensuring that new projects being undertaken will comply with the standards of the Environmental Contaminants Act. Concurrently, it is hoped that areas of special significance will be protected through the Conservation Areas Act.

Besides the specific environmental legislation to be overseen by the Office of Environment and Conservation, there are several other pieces of legislation which will also serve the objectives of environmental management of development.

The most important of these is the revision of land legislation expected in 1979. This consolidation and revision of legislation will most likely focus on the need to develop land legislation appropriate to Papua New Guinea's now independent status. One of the central principles of the

new legislation will be that the Five National Goals and Directive Principles will provide the standard against which new leasing decisions by the Land Board will be made. This will be further discussed in a later section. Legislation has now been drafted to control maritime pollution through the Merchant Shipping Act to cover oil spillages from shipping traffic. Revisions of mining and water resource legislation are expected to be undertaken within the next year and it may be assumed that the Five National Goals and Directive Principles will provide the basis for this new legislation.

V. DECISION MAKING

At the village level Papua New Guineans have always maintained a democratic style of decision making and there is considerable evidence that much of their discussion relates to the allocation of resources and land uses within the traditional clan areas. Ownership and utilization rights to certain resources was clearly understood and some conservation practices were also in effect to ensure that a continuation of supply would always exist. 5

Until very recently, this conservation ethic has been generally lacking as an integral part of decision making at the national level. This may be traced to a style of decision making that depends largely on a foreign concept and pattern of government which did not recognize the importance of the conservation ethic until comparatively recent times. Thus it is not surprising that those most influential in government decision making in relation to development, are those with a background not particularly sensitive to environmental considerations. The situation in Papua New Guinea would be quite supportive of Dasmann's suggestion that "generally speaking, the array of expert advice normally brought to bear upon the prefeasibility analysis, preinvestment survey, evaluation and planning of a project is narrow and comprised of representatives of those disciplines

/that

^{4/} K. Kisokau, Some Papua New Guinean Views on Conservation in J.H. Winslow, op. cit., p. 244.

^{5/} C.J. Healey, <u>Paradise Regained</u>, in <u>Animal Kingdom</u>, New York Zoological Society, April 1977, which provides background on traditional methods of bird of paradise conservation.

that have traditionally been consulted in such matters" or of Caldwell's view that "where the emphasis in central planning is heavily economic, environmental considerations are in danger of being thrust aside as adding to the cost and complicating the administration of development plans". 7/

In the last several years, the limitations of this approach have been recognized at the planning level but it is difficult to determine whether lip service alone is being paid or whether there is a genuine felt need that ecological, social and environmental considerations should be an absolutely vital element in development decision making. The constraint seems to be that, while having reached a level of consciousness of the economist's inability or difficulty in dealing with environmental problems within an economic decision making framework, there is a reluctance to admit that such problems should be equally stressed in decision making. This may be traced to a hesitancy by those economic, and perhaps engineering evaluators, to share their long-standing influence in the development field with newcomers such as ecologists or social scientists. This is particularly apparent when environmentalists, quite often handicapped by lack of background data and a framework for reliable predictability, appear more as alarmists than adherents of serious disciplines. The day that a project could be rejected solely on environmental grounds is still a long way off.

Thus until the passage of legislation, environmental agencies in Papua New Guinea were usually approached on a "need to know" basis with respect to potential projects, and usually in relation to possible factory effluents only.

Although the Environmental Planning Act has been passed only very recently, there is some evidence that this attitude is changing. This is less as a result of any great change of heart by project proponents or evaluators of the importance of environmental considerations, than out of respect for the ability of the Minister for Environment to require full-scale environmental assessments according to the procedures in the Act, thus blocking the development momentum and, most importantly, bringing the matters found in the course of the environmental planning process to the attention of the National Executive Council. The real challenge for environmental authorities is in choosing when to resort to this weapon,

/as

^{6/} Dassmann, Milton and Freeman, Ecological Principles for Economic Development (Wiley and Son, London, 1974) p. 19. A more recent-statement of the problem is found in the Pacific context in M.F. Strong, Mankind's Future in the Pacific. (University of British Columbia Press, Vancouver, 1976).

^{7/} L.K. Caldwell, <u>In Defence of Earth</u>, University of Indiana Press, Bloomington, 1972.

as environmental authorities elsewhere have learned, there is a limit to how often the big stick can be used before it initiates a backlash. The intention will be to encourage a co-operative, voluntary submission approach which is always in everyone's best interest and for which the act makes ample allowance.

Is then, the flexing of such muscle the only way of ensuring the infusion of environmental considerations into the development process? The Papua New Guinea experience would suggest that it is. There have for several years been requirements that proposals embodied in departmental submissions before the National Executive Council, must be circulated beforehand to the Ministry for Environment, "on matters which involve the physical and human environment, including potential effects on wildlife, ecological or human lifestyle conditions". This requirement has been ignored with impunity. Recently a proposal for an integrated sugar industry, based on a consultant's report, passed through the National Executive Council without the consultants having discussed the proposal with the Office of Environment or without the submission to cabinet having been sent to the Minister for Environment. Although an environmental plan is now being prepared by the proponent, it is already beyond the initial planning stages and some of the options in relation to siting and technology may have already been foreclosed by the NEC decision.

Once the Environmental Planning Act is gazetted and comes into force the compliance to the spirit of the Act may be expected to increase. It is one thing to avoid NEC submission procedures - quite another to try to evade an Act of Parliament with heavy penalties.

Ensuring compliance with the legislation will be the responsibility of the Office of Environment, but the intention will always be to encourage the submission of voluntary plans, with the view that the most easily facilitated environmental planning is that developed by project proponents themselves and that the procedures outlined in the legislation, particularly relating to public participation and involvement in project planning, will provide the model for such voluntary submissions. Manpower requirements to oversee the administration of the Environmental Planning Act may also then be kept to a minimum.

When this is properly undertaken, environmental consideration should be assessed alongside economic and other considerations at cabinet level decision making.

VI. KEY POINTS FOR INCLUSION OF ENVIRONMENTAL CONSIDERATIONS IN THE PLANNING PROCESS

One of the most powerful means for controlling the direction of governments and private sector activities, is the budgetary tool. In this area Papua New Guinea has taken an interesting new step in order to ensure that new revenues available to the government sector are spent in the highest priority areas. Through the National Development Strategy of October 1976, Papua New Guinea identified these areas of high priority derived from the Eight Aims and the National Goals and Directive Principles of the Constitution. Strategic objectives were then identified in nine areas in the subsequent National Public Expenditure Plan and departmental requests for increased funding over their previous allocations were to be identified against these strategic objectives on a project basis. Environmental protection has been identified as one of the strategic objectives. However, also required is a means of screening the various projects proposed in other areas, for environmental considerations. For example, "increasing economic production" is one of the strategic objectives, but it can sometimes cover a multitude of environmental sins. Projects under this category should be assessed for environmental problems at the stage before such a project goes to the National Planning Committee and, indeed this will be happening, as mentioned earlier, starting with 1980 projects.

Control though the budgeting tool is potentially one of the most effective means for incorporating environmental considerations in planning. The approach being tried within this year's NPEP review may provide both the expertise in environmental planning, needed at this early stage, and also provide a very badly needed infusion of environmental planning into economic planning, without the submission of environmental and social planning to the dictates of economic considerations as is sometimes characteristic of central planning authorities in which the three areas are combined.

This approach also gives impetus to the important role of the environmental agency in planning, rather than it being relegated solely to the sectoral roles which it plays while administering anti-pollution legislation or wildlife management. Wearing both planning and implementative hats can be difficult, but it is a role that Departments of Finance often play in governments and one which may be considered analogous to the role of the environmental agency.

Another vehicle for including environmental considerations in planning, will be through future deliberations of the national and provincial land boards established under the revised land legislation which is now being drafted. At present there is a National Land Board, which meets to consider applications from individuals or companies to develop leased government land, which is virtually the only land available for development. Customary tenure of land is not generally compatible with high technology and capital intensive techniques of development.

Up to now the Land Board has had no criteria on which the base their decisions on land allocation to determine whether it is consistent with national goals. Under the new legislation this allocation will be balanced against the National Goals and Directive Principles and in particular, Papua New Guinean ways of social and economic organization, fairness in the distribution of economic opportunity, any social or environmental damage that might be caused by changing existing land use patterns, sound longterm land use planning, and the conservation and sound management of the environment and natural resources.

This new legislation, if passed, will most likely come into effect within one year.

In addition to the above two areas, there is provision within the National Investment and Development Authority Board Act to ensure that environmental considerations in respect to development proposals of foreign investors may be incorporated within the terms of their registration to operate in Papua New Guinea.

The National Investment and Development Authority (NIDA) was established in order to promote and regulate foreign investment within Papua New Guinea. With such an ambiguous mandate this organization, since its origin in 1974, has had to spend much of its internal energy determining whether it was going to be a regulator or promoter. The same problem has appeared for the NIDA Board which is composed of the chief officers of government departments. Nonetheless, it is possible for terms and conditions of an environmental nature to be attached to the registration. The Minister for Labour and Industry may override the recommendations of the Board, however, and often does.

Because of these constraints on the NIDA Board's activities, it remains of limited use as a vehicle for ensuring that environmental considerations are examined in proposals involving foreign investors. If NIDA's mandate were changed to one of regulation there might be more scope for

this kind of environmental control. Although an environmental plan requirement as a condition of registration has been placed on a proposed cement manufacturing facility, it is not clear that the application of the requirement in this instance can be expected to be a universal precedent on other projects. In fact, there seems to be in certain instances a tendency in some agencies to apply the environmental plan requirement to projects which they have doubts about for other reasons.

More rigorous environmental requirements could potentially be placed on projects appearing on the NIDA priority list, but as long as this agency is engaged in business promotion, interest in environmental considerations is always likely to be weak.

VII. THE PUBLIC AND ITS RIGHTS

All three new pieces of legislation provide for high degrees of public involvement in the decision making process, as well as involvement from provincial and local authorities which may be affected by development proposals.

Where the full environmental planning procedure has been invoked by the Minister for Environment there are guaranteed procedures for involvement of provincial governments and notification procedures to ensure that those affected by the project will have an opportunity to make submissions to the Minister concerning the proposal.

Where voluntary submissions have been made under the Planning Act, the Minister may still continue to order that these kinds of consultation take place and that proponents will take care to ensure that as much consultation as possible takes place at an early stage.

The Environmental Planning Act will also hopefully serve to encourage longer range provincial land use planning including full consultation during this planning phase with local authorities and local people. The intention is that where long range planning has been accomplished, less time will be needed in cases where environmental plans under the planning Act are required. This will hopefully provide a direct encouragement for provincial governments to take thoughtful stock of their natural resources and their long term uses for the benefit of all the citizens of that particular province.

Under the Environmental Contaminants legislation, there are provisions for citizen enforcement of the provisions of the Act in respect of licence violations or instances of pollution and other areas. Thus, individuals may bring prosecutions under the Act where government authorities fail to initiate them.

As with the Environmental Planning Act there are extensive provisions for notification of people affected and assurance that they will have the opportunity to influence licensing decisions where water, land, or air resources are shared with others.

The Conservation Areas Act requires a high degree of public involvement in the process of proclaiming a conservation area and at the time when application for development approval is considered. As with the Environmental Planning Act, there will be encouragement for conservation area management committees to undertake some kinds of land use planning for the area.

In the assertion of public rights in the new environmental legislation, it is important to look at two other Papua New Guinea institutions which may assist village people and others with limited cash resources to enforce the Acts or deal with compensation problems resulting from pollution.

The first is the Ombudsman Commission which is charged, as in many other countries, with supervising the activities of governments to ensure fair treatment for those who are affected by the decisions of those departments. Increasing efforts are being undertaken by the Commission so that village people and others with limited access to government departments may know of their work.

The other agency, which has an almost parallel function from the legal standpoint, is the Public Solicitor's Office which provides a legal aid system for village people and those with limited financial resources. The Public Solicitor's Office has already provided assistance for a group claiming compensation for damage to fisheries caused by the Bougainville copper mining operation.

Both these agencies provide an impetus, through their ability to assist peoples directly affected by environmental deterioration, to carry their own case if governments themselves fail to adequately carry out the Fourth National Goal and Directive Principle. This power, in turn, will hopefully assist governments in coming to the right decisions about the priority of environmental considerations in development decision making.

The second National Goal and Directive Principle calls for "every citizen to be able to participate either directly or through a representative in the consideration of any matter affecting his interests or the interests of his community". In many instances, it may be shown that those most closely in harmony with their environment, are the ones most capable of making the case for its preservation. It is the intention of the Office

of Environment to undertake research into traditional conservationist practices, many of which are being rapidly lost, for incorporation into environmental education campaigns, planning procedures and legislation in the future.

Perhaps the greatest obstacle to effective implementation of these provisions, is a prevalent view by many village people that "they can only learn from the world, that they have nothing to teach it in return". 8

VIII. THE PROBLEM AREAS

There are several features of the Papua New Guinea decision making landscape in respect of environmental matters which now and in the future will likely impede a full realization of the desired goals of the Constitution and the Environmental Planning Act.

A. ADMINISTRATION FROM THE PAST

The environment area is not unique in being a fairly new concern which has appeared relatively recently on the political scene. As with other issues that have arisen in relatively recent times, it is often difficult to wedge such concepts into the administrative purview in the form of institutions or, more simply and importantly, into the minds of decision makers and their advisers within existing institutions. If it were possible to change quickly the viewpoints of such existing institutional decision makers, it would not in many cases probably be necessary to create these new institutions we call environmental agencies. Such is human nature, however, that with those who have been trained with a given viewpoint, whether engineer, economist, or administrator, the ability to accept new concepts of resource management, even despite critical situations in some instances, often comes slowly and with difficulty.

The traditional mechanism to inculcate environmental values, if environmental concern has been extant long enough to create such a tradition, has been to follow the precendent set by the National Environmental Policy Act of the United States. The purpose of that Act has been essentially to hold a "bigstick" in the form of the Environmental Impact Statement over the heads of developing agencies to ensure that they keep environmental considerations in mind in the planning of new projects and to ensure this is done at the earliest decision-making stages. The merits of such an /approach

^{8/} W.C. Clarke, Place and People: An Ecology of a New Guinean Community (Australian National University Press, Canberra, 1971). This is the concluding sentence of the book: The study provides an interesting insight into how even the simplest technology, such as axes, introduced into a primitive society living in balance with their ecosystem, can have disturbing environmental effects and result in "the rapid expenditure of environmental capital".

approach have been debated intensively, but no matter how awkward some of the procedures may oe, the Act has achieved considerable success in achieving its goal. Because of this other countries have used this "bigstick" approach, with some refinements, and Papua New Guinea is one of them.

Papua New Guinea is, however, different in having a new constitution to guide it and to implement its principles through an administration which in many cases is proceeding on pre-independence priorities, which often have little relevance to the present National Goals and Directive Principles. It also has influential advisers and institutions from the colonial era still entrenched in important positions within the administration. They have not commonly been in the mainstream of debate on these new global issues, which are also now reflected in the Papua New Guinea Constitution. The major task then, is how to turn agencies with a "develop at any cost" attitude, to an appreciation of the ecological social and cultural factors which are particularly important and peculiar to a developing country. Onstant reminders of these new priorities must emanate from the top political decision-making levels. Unfortunately such reminders are not always forthcoming.

At the same time, a dynamic Public Service Commission is needed to carefully review present institutional arrangements and compare them to the National Goals and Directive Principles. To date this review has not been made, but in the same way that the National Planning Committee should be undertaking a review of departmental spending needs in relation to the National Goals and Directive Principles, the actual establishment of the administration should be similarly subjected to close scrutiny. Much more activity is required in these areas in order for the Environmental Planning Act to have a lasting impact on government decision making.

Some of this confusion in direction may be attributable to a lack of understanding of the relationship between the Eight Aims, which have been further refined to the National Development Strategy, and the National Goals and Directive Principles. Unfortunately the National Development Strategy is rather weak in addressing itself to the constitutional principles and little has been accomplished in terms of either reconciling incompatibilities between the two doctrines or refining the National Goals to government policy. For example, these has been little discussion and further definition of "Papua New Guinean ways of social and economic organization", for application to government activities or development projects, and this is becoming an area of urgent importance.

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^{9/} See Ward and Dubos, Only One Earth (Andre Deutsh, London, 1972), p. 211.

B. THE LACK OF INTEGRATED NATURAL RESOURCE AND LAND USE PLANNING

Often departments of government vested with responsibility for the regulation of natural resource activities become embroiled, almost necessarily for survival as an institution, with the need to promote their respective areas of activity. Their desire to co-ordinate their particular field of interest with other departments is minimized. Their desire to bring a particular project to fruition under their own control as much as possible is maximized. One might take, for example, the case of the Office of Forests. In Papua New Guinea, as in many other countries, the forestry agency has been unfortunately mandated to both "promote and regulate" and particularly unfortunately for environmental interests of late, it has been mostly the former. 'Yet despite the pressures from developers to loosen controls on forest development - most of which will be at the expense of sound forest environmental practices - this agency is not likely to admit to an inevitable weakening of its environmental management responsibilities.

To rectify this situation, there must be changes to ensure more orderly land use and resource planning on a long term basis. The embryonic state of land use and resource planning in Papua New Guinea is perhaps inevitable in a country where potential financial resources directed to this end are quite limited. Provincial governments which will most likely have to bear the brunt of criticism for poorly planned development may have to undertake this kind of planning and data gathering. The lack of land use planning and the resultant concentration of large scale developments in certain areas of the country has already become an issue in a politically diverse and fragmented Papus New Guinea. For example, these has been considerable dissatisfaction in the southern part of the country (formerly Papua), which has seen much of the development momentum concentrated in the north and islands (formerly New Guinea). This has been exacerbated recently by the decision to undertake one centralized sugar industry located in the north, without first considering thoroughly the possibility of more decentralized processing techniques, which would have likely permitted a Papuan location as well.

As mentioned previously the intention of the Environmental Planning Act and the Conservation Areas Act is to encourage regional land use planning and co-ordination of activities among resource utilization departments.

C. TRADITIONAL LAND USE PRACTICES

Traditional land use practices, particularly slash-and-burn agriculture, especially in the highlands areas of the country, which are also the most populous areas, represent perhaps the greatest challenge to environmental and natural resource managers in government. The administrative overhead involved to change these age old practices through regulation would be colossal and more than likely a failure in any case. Yet slashand-burn agriculture is one of the most ecologically destructive practices and one with which any environmental programme must come to grips. major means of control must come through the promotion of more soil conservationist methods of subsistence agriculture, using natural fertilizers and adapting land use so that fertility of steeply sloped gardens may be maintained longer. There is special impetus for the encouragement of these new practices in areas of the highlands where population pressure is creating land shortages and thus these new practices may now be more readily adopted by a more receptive populace.

At the same time there should be increased efforts in the environmental education field to promote these new kinds of subsistence agriculture. Unfortunately, to date, there has been little interest in this particular problem in the department responsible for agriculture, which has been more interested in the promotion of cash cropping, although there is evidence in their 1980 NPEP proposals that this is changing. More intensive efforts by both the environment and agriculture departments appear to be the only practicable way of combatting the increased problem of depletion of soil fertility. The Office of Environment is currently commissioning a study of the crucial nexus between population growth, soil fertility, land use and urban migration in connexion with the office's responsibility for population policy. There is considerable evidence that people living in these densely populated highland areas are beginning to understand the connexion. Efforts are now being made to capture villagers impressions on tape for use in future educational broadcasts in conjunction with population programmes.

There are also other problems stemming from traditional practices, such as water pollution, which can only be curtailed through increased educational efforts.

D. MANPOWER SHORTAGES

The serious dearth in government of personnel with a wide background to understand the range of environmental problems, is a major concern for the effective implementation of environmental programmes.

An effective application of environmental legislation will require those with a broad educational background to understand the myriad implications of development proposals and at the same time, in connexion with the Environmental Contaminants Act, there will also be required those with a more specialist background in sciences to undertake monitoring and licencing responsibilities.

Since Papua New Guinea is a very young country, and with universities only a few years old, the number of graduates with significant experience in these areas is very small and, with the lack of legislation until now, there has been no incentive to create university programmes geared to environmental concerns, although there have been approaches, in a peripheral way, in more general courses and in a few specialized courses. Natural science students are currently exposed to a substantial amount of environmental education through biology courses. It is hoped that universities stimulated by the passage of legislation will establish environmental studies programmes and increase the environmental component in various facets of other programmes.

In the establishment of standards and regulations under the Environmental Contaminants Act relating to the licensing of air and water discharges there may be considerable difficulties in hiring Papua New Guineans with the necessary experience and background:

It is expected that initially much of the inspectorial services with respect to the Environmental Contaminants Act will be undertaken by the Health Department whose inspectors are graduates of a health training college where a large component of their training is in environmental health.

At the policy making level there are very few graduates available from university with the wide background necessary to have a broad understanding of the ecological issues involved in development planning, although many are equipped to understand the social and cultural issues.

The Office of Environment is sponsoring a 1980 NPEP project to provide an environmental educator who will be responsible for developing programmes for social science studies at the University and also for organizing seminar and short courses for public servants in environmental planning. A staff member of the Office of Environment is presently designing secondary school curriculum courses.

In conclusion, it may be several years before all the necessary manpower resources are available to provide oversight and enforcement of the environmental legislation to the same degree as would be found in other countries.

E. INCREASING POPULATION PRESSURES

As with economic forecasts and predictions, an exploding population can throw out of kilter any programmes or policies designed to enhance or preserve environmental quality just as it would those aimed at increasing GNP per capita. This problem is becoming particularly acute in urban areas and is certainly not a problem confined to Papua New Guinea.

Besides the social and ecological problems created by a rapidly expanding urban population, there are also problems created in the rural areas in which most Papua New Guineans live, particularly the highland areas. In these areas population pressure has contributed greatly to increased incidence of tribal fighting as increasingly, arable land becomes more and more at a premium. Many areas of the highlands have seen the extension of cultivation up to 2,000 m altitudes and onto some of the steepest slopes imaginable, causing serious erosion and soil depletion. Although Papua New Guinea has a large land area in proportion to its population, the most productive agricultural lands are concentrated in small pockets and, because of the healthier living conditions there, the population has grown more quickly in these areas then elsewhere, although nutrional deficiencies are now starting to appear.

In the Gazelle Peninsula of East New Britain, endowed with extremely rich volcanic soil, the population is growing at rates comparable to that of the highest growth rates of other developing countries, bearing out the often made generalization that population will increase to the level at which the land will support it. At present this area is still largely self-sufficient in supporting its inhabitants, but in the highlands many people are beginning to migrate in large numbers to the cities.

Population policy in Papua New Guinea is a function of the Office of Environment and Conservation. Measures are being taken to ensure that the relatively good subsistence base in Papua New Guinea is not removed in the process of rural development, causing out-migration, and that steps may be taken to ensure that the need for population control is understood both at government decision-making levels and also within areas such as the highlands, where population is growing at too rapid a pace.

It is however, still disturbing to see how much energy in government departments and planning bodies is being spent on resource related development projects and how relatively little is spent on the urgent problems which if unsolved will nullify the benefits from those projects.

It is hoped that through the Environmental Planning Act and the requirement for plans under the Act that the relationship between man and the earth's finite natural resources may become more apparent. That is, development rarely comes without the sacrifice or degradation of some natural element vital to mankind is ultimate welfare. The relationship of the use of these vital resources with the needs of future generations must be scrutinized closely.

F. IMPORTED SOLUTIONS TO COMPLEX PROBLEM

Papua New Guinea has had a long history, as have many other former colonies, in the application of developed nation solutions and institutional structures to complex indigenous problems. In some cases the solutions succeeded but in many others they have not proved satisfactory.

The former Australian administration's land policy represents a solution which succeeded in generally preserving customary lands from undue exploitation by development interests, and through the establishment of a leasing system, rather than through freehold, provided Papua New Guinea with a wide range of options in respect to land utilization that does not exist in many other countries, at the same time providing for an enviable system for the incorporation of environmental dimensions into land use planning.

Other policies in the natural resource area, however, have floundered badly out of a lack of appreciation for Papua New Guinean social and cultural factors and a lack of understanding of the villager and his relationship to his immediate environment in the subsistence life style context. For example the mining legislation, even after several revisions, is still not really acceptable to many Papua New Guineans who must bear the consequences of mining development. Mineral exploration permits are held for areas on Bougainville Island, yet village people in the area have blocked any further exploration.

A good illustration of this phenomenon is given in relation to a large forestry proposal where the lack of consultation with village people foredoomed the project, even though the same kind of development procedures might have been successful in a more developed country. 10/

/The

^{10/} J. Waiko, The People of Papua New Guinea, Their Forests and Their Aspirations in J. Winslow op. cit., p. 407.

The paternalistic "we know what's good for you" style of development planning was a feature of the colonial administration and there is evidence that this style persisted into the independence era with many of the former personalities and institutions acting in much the same way. The continued management of natural resource legislation and policy which reflects this foreign cutlook will continue to create problems in the future until it is revised from a purely endogenous point of view.

To date there has been little enforcement of the Fifth National Goal and Directive Principle requiring the achievement of development through Papua New Guinean forms of social, political and economic organization. This is attributable perhaps to a lack of interest by those who are steeped in pre-independence priorities, to consider the necessary changes in administration and by a lack of prodding at the political level to accomplish this.

G. LACK OF ENVIRONMENTAL INFORMATION

One of the greatest handicaps to the inclusion of environmental considerations in planning is the lack of environmental data on which environmental agencies may base their judgements in development planning.

Environmentalist agencies have often been viewed as "alarmist" and the lack of support data to assist predictions of environmental impacts can hardly help to dispel this view when banked against detailed studies of economic and engineering factors undertaken at the prefeasibility stages. The only alternative is to gather adequate and appropriate data but the cost is usually high and this inhibits developing countries.

At the same time, foreign investors are reluctant at the feasibility stage to undertake the cost of gathering this background data considering it a government duty, even though the need for the data only arose with the development proposal itself. This is perhaps yet another hidden cost of development and is especially serious in tropical areas where the amount of research so far undertaken has been limited. Thus, problems have arisen in Papua New Guinea at an early stage with the "polluter pays" principle, The important question is who should pay for the relevant background studies. 11/

/Another

^{11/} Recently, in connexion with the Oktedi Copper Mining Project, significant funding has become available for environmental studies, which is encouraging. Whether the government should pay for the studies in future projects has yet to be decided.

Another question that arises is how to make a convincing case on environmental grounds without this background data. A lack of this data will always prevent a sound hearing for environmental concerns. One of the most important elements of the Conservation Areas Act is the switch of onus regarding the environmental impact of developments to the developer himself, i.e. the developer will be responsible for justifying the change in land use. This may remove the negativist element which always surrounds present development decision making where the environmentalist is always cast in the role of the naysayer.

IX. THE FUTURE

The determination of how effectively the environmental legislation and planning procedures will operate in Papua New Guinea depends ultimately on the political will to carry out the National Goals and Directive Principles.

Papua New Guinea, as earlier mentioned, is an extremely diverse country in which many of the problems in political circles revolve around an equal distribution of services and development opportunities to all areas of the country. National unity remains a key issue and a preoccupation of the top decision makers.

Development is still an important concept in political circles, but the ability to discern what is development merely for its own sake and the key elements of development according to the National Goals and Directive Principles may elude top decision makers in many cases. At other times political decision makers have shown the right kind of concern when the administration was not tuned in to the environmental problems. Thus, there is sporadic interest in environmental concerns and in controlling the style of development, but it does not appear as a consistent theme in cabinet decision making. Hopefully consistent use of the environmental planning technique will change the style of decision making in this regard. With the application of environmental planning techniques to accompany every development proposal presented to top decision makers, there may hopefully be an assurance of the incorporation of these issues.

Later, there may come an appreciation for the need to reorganize the public service in such a way that the priorities expressed in the National Goals and Directives Principles will be more satisfactorily carried out by the administrators. This would be the most adventurous exploration into institutional innovations that Papua New Guinea could make; however, it is still too soon to speculate as to what form this might take or whether the administration would yet have the self-confidence to sail into such uncharted waters.

Until then, the environmental planning tool may be used as the means through which there will be a constant appreciation for environmental values. It may be that only through the constant highlighting of its importance throughout the decision-making process, will the costs of inappropriate development become apparent.

An encouraging feature for the future maintenance of environmental quality may be the steps towards decentralization of decision making.

Those who are most affected by development decision making should play a large role in the decision-making process. In a country such as Papua New Guinea, they may often be the people with the most knowledge on environmental conditions and at the same time those who will suffer the consequences of environmental deterioration. The environmental planning legislation intends to bring into the decision-making process the interests of those who will be affected most by developments. At the same time, through their provincial governments they will hopefully be able to play a more influential role in decision making at that level.

In Papua New Guinea today, some of the institutions and tools are already available for the incorporation of environmental and conservation principles into development planning. An exercise of political determination alone will demonstrate how effectively they will be implemented.

/Annex I

Annex I

THE INDEPENDENT STATE OF PAPUA NEW GUINEA

No. 45 of 1978

Environmental Planning Act 1978

ARRANGEMENT OF SECTIONS

PART I. - PRELIBITARY

- 1. Compliance with constitutional requirements
- 2. Interpretation -

"this Act"

"authority"

"beneficial use"

"Board"

"Director"

"environment"

"environmental contaminant"

"environmental plan"

"Local Government Council"

"project"

"proponent"

"proposal"

"province affected"

"Provincial Secretary"

"register"

"requisition"

3. Application

PART II. - ENVIRONMENTAL PLAN

- 4. Submission of environmental plan
- 5. Guidelines
- 6. Notice to be published
- 7. Duty to advise Minister
- 8. Restraint on approvals, etc.
- 9. No compensation payable
- 10. Exemption
- 11. Person or authority may make representations
- 12. Exemption may be granted

PART III. - ASSESSIBLE OF ENVIRONMENTAL PLAN

- 13. Assessment of environmental plan
- 14. Person or authority may make representations to Minister
- 15. Recommendation
- 16. Notice of recommendation to be published, etc.

PART IV. - DECISION

- 17. Board of Inquiry or reference to Mational Planning Committee
- 18. Decision

- 19. Offence to proceed.
- 20. Preservation of legal remedies.
- 21. Subsequent submission.

PART V. - GENERAL.

- 22. Withdrawal of environmental plan.
- 23. False information.
- 24. Information may be withheld.
- 25. Service of notices, etc.
- 26. Register.
- 27. Institution of proceedings, etc.
- 28. Environmental Contaminants Act to apply.
- 29. General penalty.
- 30. Inspection.
- 31. Obstruction of inspectors.
- 32. Regulations.

/THE

THE INDEPENDENT STATE OF PAPUA NEW GUINEA

No. 45 of 1978

(Certified on: 4 September 1978)

Environmental Planning Act 1978

Being an Act -

- (a) relating to development of the environment having regard to uniform systems of environmental management in accordance with the fourth goal of the National Goals and Directive Principles; and
- (b) to give effect to those Goals and Principles under Section 25 of the Constitution; and
- (c) for other purposes,

MADE by the National Parliament to come into operation in accordance with a notice published in the National Gazette by the Head of State, acting with, and in accordance with, the advice of the Minister.

PART I. - PRELIMINARY.

1. - COMPLIANCE WITH CONSTITUTIONAL REQUIREMENTS.

- (1) This Act, to extent that it -
 - (a) regulates or restricts a right or freedom referred to in Subdivision III.3.C of the Constitution, namely -
 - (i) the freedom from arbitrary search and entry conferred by Section 44 of the Constitution; and
 - (ii) the right to privacy conferred by Section 49 of the Constitution; and
 - (b) regulates a right or freedom referred to in Subdivision III.3.C of the Constitution, namely, the right to freedom of information conferred by Section 51 of the Constitution,

is a law that is made for that purpose, taking into account the National Goals and the Basic Cocial Obligations, particularly the fourth goal of the National Goals and Directive Principles entitled "national resources and environment".

(2) For the purposes of Section 29 of the Organic Law on Provincial Government, it is hereby declared that this law relates to a matter of national interest.

2. - INTERPRETATION.

In this Act, unless the context otherwise requires, or some other meaning is clearly intended -

"this Act" includes the Regulations;
"authority" includes any Minister, Departmental Head,
head of a statutory authority or body, member of a provincial
government body, Local Government Council or Local Government
Authority;

- "beneficial use" means a use of the environment or any element or segment of the environment that is conducive to public benefit, welfare, safety of health;
- "Board" means a Board of Inquiry established under Section 17;
 "Director" means the Director of the Office Environment and
 Conservation;
- "environment" means the total stock of physical, biological and social resources available to man and other species and the ecosystems of which they are a part;

"environmental contaminant" means -

- (a) any substance whether liquid, solid, gaseous, or radio-active, or any form of electromagnetic or thermal energy which, when discharged, emitted or deposited into the environment, causes or may cause, by reason of its properties, characteristics, the volume, amount and weight and point of its discharge or other relevant circumstances, a present or future alteration of the enrivonment so as to affect adversely its beneficial use; and
- (b) any prescribed substance, material or matter;

"environmental plan" means an environmental plan required under this Act;

"Local Government Council" includes any local level government established under a provincial law;

"project" means any development, scheme, construction, undertaking or activity which would involve a change of use or condition; "proponent" means the person proposing and assuming responsibi-

lity for any proposal;
"proposal" means any intention or proposal to embark upon any
project;

"province affected" means the National Capital District or province or provinces in which any project, which is the subject of a proposal, is located;

"Provincial Secretary" means the person having administrative charge of a provincial secretariat of a provincial government, and in the case of the National Capital District means the District Commissioner;

"register" means the register under Section 26;

"requisition" means a requisition under Section 4.

3. - APPLICATION.

- (1) This Act binds the State.
- (2) This Act does not apply to any project to which applies the -
 - (a) Mining (Bougainville Copper Agreement) Act 1967; or
 - (b) Mining (Ok Tedi Agreement) Act 1976; or
 - (c) Petroleum (Gulf of Papua Agreements) Act 1976.

PART II. - ENVIRONMENTAL PLAN.

4. - SUBMISSION OF ENVIRONMENTAL PLAN.

(1) Where, after the commencement of this Act a proposal is to be implemented, and the project involved is one of a class of projects in respect of which guidelines have been issued under Section 5, the Minister , may, have significant environmental implications, serve a requisition in the prescribed form on the proponent requiring him to submit an environmental plan.

- (2) An environmental plan required under Subsection (1) shall -
 - (a) recognize and be responsive to the National Goals and Directive Principles of the Constitution as the basis for planning; and

be formulated -

- (i) in response to any development goals, strategies or plans consistent with the National Goals and Directive Principles issued by the Director of the National Planning Office or the Provincial Secretary of the province affected; and
- (ii) in response to any guidelines, directions or plans on the protection, conservation and management of the environment consistent with the National Goals and Directive Principles issued by the Minister or the Provincial Secretary of the province affected.
- (3) The Minister may allow an environmental plan to be submitted as a series of parts during the planning, feasibility study, construction or operational phase of any project, each part of which shall be dealt with as an environmental plan in the manner provided by this Act.

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- (4) The Minister may, by notice in writing, require the proponent to furnish to him any additional information, plans or specifications as the Minister thinks fit. (10) (10)
- (5) Any information, plans or specifications provided under Subsection (4) shall be deemed to be part of the environmental plan.
- (6) A proponent may submit an environmental plan for a present or future proposal at any time before a requisition is served on him under Subsection (1).
- (7) Where an environmental plan submitted under Subsection (6) is written in accordance with the terms of Subsection (2) and the guidelines issued under Section 5, the Minister may and the guidelines issued under Section 5, the Minister may -
 - (a) approve the proposal; or

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- (b) approve the proposal subject to such terms and conditions as he thinks fit; or
- (c) refuse to approve the proposal.
- (8) Where the Minister refuses to approve a proposal under Subsection (7) (c), the proponent may, by notice in writing, request the Director to implement the procedures otherwise set out in this Act for environmental plans and the Director shall accede to that request and the procedures shall be put into operation as if a requisition had been served under Subsection (1).

5. - GUIDELINES.

- (1) The Minister shall cause to be prepared and issued general guidelines for the preparation and content of environmental plans and these guidelines may exempt certain classes of projects from the provisions of this Act.
- (2) The Minister may issue specific guidelines for designated classes of projects and in so doing shall consult with, or direct that consultations be undertaken with, persons who are likely to be affected by the application of the provisions of this Act to such classes of projects.
- (3) Guidelines issued under this section shall recognize the necessity for the cohesive, integrated and efficient planning of Papua New Guinea's development and the roles of other Ministers, provincial governments and other persons in such planning.
- (4) The Minister may from time to time revise guidelines issued under this section, and in so doing shall consult with persons who are likely to be affected by such revisions.
- (5) Guidelines issued under this section shall recognize that environmental planning involves the consideration of the section of the section
 - (a) the long-term and short-term objectives of the proposal or project; and
 - (b) the proposal or project and alternatives to that proposal or project including alternative sites; and
 - (c) alternative methods of carrying out the proposal or project and recommendations for a particular method; and
 - (d) the environment that may be, or may reasonably be expected to be, affected directly or indirectly, immediately or in the long-term future; and
 - (e) the environmental changes that may result from carrying out the proposal or project; and
 - (f) the actions proposed to prevent or mitigate any adverse environmental changes that may occur as a result of carrying out a proposal or project; and
 - (g) the projected utilization of natural resources and energy; and
 - (h) the projected use and discharge of environmental contaminants; and
 - (i) the costs and advantages that may accrue from a proposal or project; and
 - (j) any permanent change in the physical, biological, social cr cultural characteristics of the affected environment or in the possible future use of that environment; and
 - (k) any matters that are necessary or that, in the opinion of the proponent or the Director, are relevant to the environmental plan.

6. - NOTICE TO BE PUBLISHED.

Where a requisition is served under Section 4(1), the Minister shall -

- (a) forward a copy of the requisition to -
 - the Provincial Secretary of the province affected; and

- (ii) all other authorities and persons who, in his opinion, may be affected by the carrying out of the carrying out of the proposal; and
- (b) within 21 days of the service of the requisition publish a notice in the National Gazette that shall contain -
 - (i). notice of the service of the requisition; and
 - (ii) a description of the proposal; and
 - (iii) a declaration that Section 8 is in force.

7. - DUTY TO ADVISE MINISTER.

- (1) Where any proposal in respect of which a requisition under Section 4(1) has not been served comes to the notice of an authority, and the proposal can be construed as having significant environmental implications, that authority shall forthwith -
 - (a) advise the Minister of that proposal; and
 - (b) forward to the Minister any plans and specifications available to it and any other information that, in its opinion, is relevant.
- (2) The Minister may, from time to time, request information from an authority concerning a proposal, and that authority shall, where practicable, furnish that information.
- S. RESTRAINT ON APPROVALS, ETC.
 - (1) Subject to Subsection (2), no authority shall -
 - (a) grant any licence, permit or lease that may be required under any law; or
 - (b) provide any loan, grant, guarantee or subsidy,

in respect of any matter the subject of a requisition under Section 4(1) prior to or inconsistent with the terms and conditions of the approval of that proposal by the National Executive Council under Section 1%(1) (C) or (d).

(2) Where the proponent is applying for registration, or has been registered, under Section 56 of the National Investment and Development Act 1974, the Executive Director of the National Investment and Development Authority may request the Minister to state a time limit, from the date of submission of the environmental plan by the proponent, within which the Minister shall make a recommendation to the National Executive Council under Section 16(2), and the Minister shall comply with such request and adhere to the stated time limit.

9. - NO COMPENSATION FAYABLE.

Where a proponent proceeds with any works, or incurs any expenditure, in relation to a proposal prior to approval of the proposal by the National Executive Council and -

- (a) the approval is refused; or
- (b) the approval is given subject to terms and conditions on which the proponent declines to proceed,

no compensation may be claimed by the proponent in respect of those works or that expenditure.

10. - EXEMPTION.

- (1) A proponent may, by application in writing to the Minister, request exemption from submitting an environmental plan in respect of that proposal.
- (2) On receipt of an application under Subsection (1), the Minister shall, within 14 days -
 - (a) forward a copy of the particulars of the application to--
 - (i) the Provincial Secretary of the province affected; and
 - (ii) all other authorities and persons who, in his opinion, may be affected by the carrying out of the proposal; and
 - (b) publish a notice -
 - (i) in the National Gazette; and
 - (ii) in a newspaper circulated nationally; and
 - (iii) in a newspaper circulated in the province
 affected; and
 - (iv) by a radio broadcasting service which specifically serves the province affected,

that shall -

- (v) contain a description of the proposal; and
- (vi) contain particulars of the application for exemption; and
- (vii) state that any person or authority may make representations to the Minister concerning the application for exemption within 28 days.
- (3) The Minister may require the proponent to furnish any information, plans or specifications in relation to an application under Subsection (1) as he thinks fit.
- (4) Where an application under Subsection (1) is false or misleading in any material particular, the proponent is guilty of an offence.

Penalty: A fine not exceeding K500.00.

- 11. PERSON OR AUTHORITY MAY MAKE REPRESENTATIONS.
- (1) Any person or authority may, within 28 days of the date of publication of a notice under Section 10(2), make representations to the Minister concerning an application for exemption under Section 10(1).
- (2) On receipt of a representation under Subsection (1), the Minister may invite the person or authority making the representation -

- (a) to provide further information; or
- (b) to enter into consultation with him.

12. - EXEMPTION MAY BE GRANTED.

- (1) The Minister may, after considering -
 - (a) the application for exemption together with all material lodged under Section 10; and
 - (b) any representations made to him under Section 11,

grant an exemption or refuse to grant an exemption.

- (2) Where the Minister grants an exemption under Subsection (1), he shall -
 - (a) publish a notice in the National Gazette stating the reasons for granting the exemption: and
 - (b) notify the Provincial Secretary of the province affected of the reasons for granting the exemption.

PART III. - ASSESSMENT OF ENVIRONMENTAL PLAN.

13. - ASSESSMENT OF ENVIRONMENTAL PLAN.

- (1) The Minister shall, as soon as practicable after the submission of an environmental plan, cause an assessment to be made of the proposal.
- (2) As soon as practicable after the completion of an assessment under Subsection (1), the Minister shall -
 - (a) send a copy of the environmental plan together with the assessment to the Provincial Secretary of the province affected and advise him that representations may be made within a specified time; and
 - (b) publish -
 - (i) in the National Gazette: and
 - (ii) in a newspaper circulated nationally; and
 - (iii) in a newspaper circulated in the province affected; and
 - (iv) by a radio broadcasting service which specifically serves the province affected,

a notice that shall state -

- (v) that an environmental plan has been lodged and its assessment made; and
- (vi) where the environmental plan and its assessment may be inspected; and
- (vii) thay any person or authority may make representations to the Minister on the environmental plan or its assessment within the time specified in the notice.
- (3) The time specified in a notice under Subsection (2) shall be not less than 28 days.

- 14. PERSON OR AUTHORITY MAY MAKE REPRESENTATIONS TO MINISTER.
- (1) Any person or authority may, within the time specified in a notice under Section 13 (2)(b), make representation to the Minister concerning an environmental plan or its assessment made under Section 13(1).
- (2) On receipt of a representation under Subsection (1), "the Minister may invite the person or authority making the representation -
 - (a) to provide further information; and
 - (b) to enter into consultation with him.

15. - RECOMMENDATION

At the end of the period specified in the notice under Section 13(2)(b), the Minister -

- (a) shall cause a summary of any representation made to him under Section 14 to be prepared; and
- (b) may cause a recommendation based on -
 - (i) the environmental plan; and
 - (ii) the summary under paragraph (a); and
 - (iii) any other matter relevant to the proposal,

to be prepared.

- 16. NOTICE OF RECOMMENDATION TO BE PUBLISHED, ETC.
- (1) As soon as practicable after the preparation of the summary and recommendation, if any, under Section 15, the Minister may, where he is satisfied that substantial unresolved matters exist in the environmental plan, or that significant differences exist between any recommendation made under Section 15(b) and the original proposal, or that significant public opinion demands further consultation -
 - (a) send a copy of the summary and recommendation, if any, to the Provincial Secretary of the province affected; and
 - (b) advise any other authority likely to be affected by the environmental plan of the summary and recommendation, if any; and
 - (c) by notice published -
 - (i) in the National Gazette; and
 - (ii) in a newspaper circulated nationally; and
 - (iii) in a newspaper circulated in the province affected; and
 - (iv) by a radio broadcasting service which specifically serves the province affected.

advise that the summary and recommendation, if any, may be inspected for the period specified in the notice at the places specified in the notice. -

- (2) The Minister shall -
 - (a) as soon as practicable after a summary and any recommendation have been prepared under Section 15; or

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(b) where he has given notice under Subsection (1), on the expiry of the period of notice.

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(c) the environmental plan or a summary thereof; and

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- (d) the assessment; and(e) the summary of representations, if any; and
- (f) the recommendation if any

PART IV. - DECISION.

17. - BOARD OF INQUIRY OR REFERENCE TO NATIONAL PLANNING COMMITTEE.

- (1) Where the National Executive Council having considered the submission made under Section 16(2) is of the opinion that further investigation is required, it may
 - and the second of the second of the second (a) establish a Board of Inquiry to conduct an investigation;
 - (b) refer the matter to the National Planning Committee or any other body for its opinion.
- (2) A Board established under Subsection (1)(a) shall consist of not more than five members appointed by the National Executive Council of whom one shall be Chairman.
- (3) The Chairman shall preside at all meetings of the Board.
- (4) At a meeting of the Board, the Chairman and two members form a quorum.
- (5) Questions arising at a meeting of the Board shall be decided by a majority of the votes of members present and voting, and in the event of an equality of votes on a matter, the Chairman shall have a deliberative as well as a casting vote. rest the man the ٠,,,
- SATTER OF THE Service Review (6) Subject to Subsection (7), an inquiry shall be held in public and evidence shall be taken in public on oath or affirmation.
- (7) Where the Chairman is satisfied that it is desirable to do so by reason of the confidential nature of any evidence, he may -
 - The second of the second second second (a) direct that all or part of the evidence be given in private; and
 - (b) give directions as to who may stay to hear the evidence;
 - give directions prohibiting or restricting the reporting and publication of the evidence or any part thereof.
 - (8) A Board
 - shall comply with the principles of natural justice; and

- (b) is not bound by the technical rules of evidence or procedure; and
- (c) shall investigate and inform itself on all matters relevant to the application and admit and consider such relevant information as is available; and
- (d) may summon witnesses, by instrument under the hand of the Chairman; and
- (e) may take evidence on oath or affirmation, and administer oaths and affirmations for the purpose; and
- (f) may, by instrument under the hand of the Chairman, require a person to produce a document, book or paper in his possession or control.
- (9) A person who, when summoned or required under this section to give evidence or to produce a document, book or paper in his possession; or control, fails without reasonable excuse (proof of which is on him) -
 - (a) to attend before the Board at the time and place appointed in the summons or requirement; or
 - (b) to be sworn or make an affirmation; or
 - (c) to answer any question put to him by the Board; or
 - (d) to produce the document, book or paper,

is guilty of an offence.

Penalty: A fine not exceeding K500.00.

(10) A person who, without lawful excuse (proof of which is on him) directly or indirectly hinders or obstructs a Board in the exercise or performance of its jurisdiction, powers, functions, duties and responsibilities is guilty of an offence.

Penalty: A fine not exceeding K500,00.

(11) In the exercise of their functions and the performance of their duty the members of a Board holding an inquiry have the same protection and immunities as a Judge.

(12) Where -

observice of a

- (a) a Board has been established under Subsection (1)(a); or
- (b) a reference has been made to the National Planning Committee or any other body under Subsection (1)(b),

a final report shall be submitted by the Board, the National Planning Committee or the other body, as the case may be; to the National Executive Council within 56 days from the date of establishment or reference, as the case may be.

13. - DECISION.

- (1) After consideration of -
 - (a) the final report under Section 17(12), if any; and

(b) the submission under Section 16(2),

the National Executive Council shall -

- (c) approve the proposal;
- (d) approve the proposal subject to such terms and conditions as it thinks fit; or
- (e) refuse to approve the proposal.
- (2) The Minister shall -
 - (a) give notice in writing to the Provincial Secretary of the province affected of the decision of the National Executive Council under Subsection (1); and
 - (b) by notice published in the National Gazette -
 - (i) give notice of the decision of the National Executive Council under Subsection (1); and
 - (ii) where approval of a proposal is refused, declare that proposal to be prohibited.

19. - OFFENCE TO PROCEED.

(1) Subject to Section 21, a person who proceeds with a proposal that is prohibited under Section 18 is guilty of an offence.

Penalty: A find not exceeding K40,000. Default penalty: A fine not exceeding K4.000.

(2) Subject to Section 21, where a proposal is approved subject to conditions, a person who proceeds with the proposal in contravention of those conditions is guilty of an offence.

Penalty: A fine not exceeding K40,000. Default penalty: A fine not exceeding K4,000.

(3) A person who acts in breach of any of the terms and conditions of an approval by the Minister under Section 4(7) is guilty of an offence.

Penalty: A fine not exceeding K40,000.

Default penalty: A fine not exceeding K4,000.

20. - PRESERVATION OF LEGAL REMEDIES.

Nothing in this Act shall preclude the commencement of proceedings at law for an injunction.

- 21. SUBSEQUENT SUBMISSION.
 - (1) Where the National Executive Council has -
 - (a) approved a proposal subject to conditions; or refused to approve a proposal,

under Section 18(1), a proponent may, after making those modifications to the proposal as are necessary or desirable, submit to the Minister a revised environmental plan.

(2) The provisions of this Act shall apply to a revised environmental plan as, if that plan was the environmental plan submitted under Section 4.

(3) Where the National Executive Council refuses to approve a revised environmental plan under Subsection (1), the National Executive Council may reserve the right to the proponent to submit a further revised environmental plan subject to Subsection (2).

PART V. - GENERAL

22. - WITHDRAWAL OF ENVIRONMENTAL PLAN.

- (1) Where a proponent does not wish to proceed with a proposal, he may, by notice in writing to the Minister, withdraw an environmental plan submitted under this Act.
- (2) Where the Minister has received a notice under Subsection (1), he shall as soon as practicable return to the proponent the environmental plan and any plans and specification provided to the Minister by the proponent in connexion with the proposal.

23. - FALSE INFORMATION.

Any person who wilfully provides any information that is false or misleading in any material particular in relation to -

- (a) an environmental plan; or
- (b) a submission under Section 13(2); or
- (c) information given to a Board,

is guilty of an offence.

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Penalty: A fine not exceeding K500.00.

24. - INFORMATION MAY BE WITHHELD.

- (1) Notwithstanding the provisions of this Act, where the Minister is of the opinion that -
 - (a) information or data contained in an environmental plan: or
 - (b) the assessment of an environmental plan; or
 - (c) the approval or refusal of approval of the National Executive Council,

is of a nature that it is in the public interest that it should not be divulged, the Minister may withhold any part from that environmental plan, assessment, approval or refusal of approval from public inspection.

(2) Where the Minister withholds any information under Subsection (1), the document or plan from which the information has been withheld shall be endorsed with a notice that the Minister has exercised his power under that subsection, and the reason for that exercise.

25. - SERVICE OF NOTICES, ETC.

The service of a notice or requisition under this Act may be effected personally or by post, and in the case of a corporation may be served at or posted to its registered office or principal place of business.

26. - REGISTER.

(1) The Director shall keep a register that shall contain a copy of -

- (a) environmental plans; and(b) assessments; and
- (c) representations; and
- (d) decisions.

in connexion with every proposal.

- (2) The register shall be available for inspection by any person at all reasonable times.
- (3) Any person may be entitled to search for, demand and obtain copies of any entry in the register.
- (4) The mere production of the register, a copy or an extract from the register certified by the Director to be the register or a true copy of the register or a true extract from the register is evidence of the matters contained in it.

27. - INSTITUTION OF PROCEEDINGS, ETC.

- (1) Proceedings for offences against this Act shall be taken in the National Court and may be taken by any person.
- (2) Where for the purposes of this Act, or in any proceedings under this Act it is necessary to tender in evidence -

 - (a) an environmental plan; or
 (b) an assessment of an environmental plan; or
 (c) any representations made under Cection 14(1); or
 - (d) any recommendation made to the National Executive Council,

the production of a copy thereof purporting to bear an endorsement by the Minister that it is a true copy of the original document lodged or prepared under this Act shall be admissable in evidence and sufficient evidence of the matters contained therein.

28. - ENVIRONMENTAL CONTAMINANTS ACT TO APPLY.

Nothing in this Act shall relieve a proponent from compliance with the Environmental Contaminants Act 1978.

29. - GENERAL PENALTY.

Any person who fails to comply with a provision of this Act applicable to him in respect of which a specific penalty is not provided is guilty of an offence.

Penalty: A fine not exceeding K500.00.

30. - INSPECTION.

- (1) The Minister may, by notice in writing, authorize any person to be an inspector for the purposes of this Act.
- (2) An inspector may at all reasonable times enter an inspect any building or place the subject of a proposal.

31. - OBSTRUCTION OF THESPECTORS. A person who -

- (a) hinders or obstructs an inspector in the execution of his duty; or
- (b) refuses or fails to comply with any reasonable request of an inspector in the exercise or performance of his powers and functions under this Act,

is guilty of an offence.

Penalty: A fine not exceeding K500.00.

32. - REGULATIONS

The Head of State, acting on advice, may make Regulations not inconsistent with this Act prescribing all matters that are by this Act required or permitted to be prescribed, or that are necessary or convenient to be prescribed for carrying out or giving effect to this Act, and in particular for -

- (a) the payment of fees to the members of a Board; and
- (b) the form of notices and documents required under this Act; and
- (c) fees to be paid for lodgement of any documents required under this Act, or copies of information contained in the register; and
- (d) the employment of and payment of fees to consultants engaged in connexion with matters arising under this Act; and
- (e) the imposition of fines not exceeding K500.00 for offences against the Regulations.

/Annex II

Annex II

PAPUA NEW GUINEA'S EIGHT AIMS

A rapid increase in the proportion of the economy under the control of Papua New Guinean individuals and groups and in the proportion of personal and property income that goes to Papua New Guineans.

More equal distribution of economic benefits, including movement toward equalization of incomes among people and toward equalization of services among different areas of the country.

Decentralization of economic activity, planning and government spending, with emphasis on agricultural development, village industry, better internal trade, and more spending channelled to local and area bodies.

An emphasis on small scale artisan, service and business activity, relying where possible on typically Papua New Guinean forms of business activity.

A more self-reliant economy, less dependent for its needs on imported goods and services and better able to meet the needs of its people through local production.

An increasing capacity for meeting government spending needs from locally raised revenue.

A rapid increase in the equal and active participation of women in all forms of economic and social activity.

Government control and involvement in those sectors of the economy where control is necessary to achieve the desired kind of development.

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