REPORT
ON THE
WORLD SOCIAL
SITUATION

4

with special reference to the problem of balanced social and economic development

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PREFACE

The Economic and Social Council, in its resolution 663 E (XXIV), requested the Secretary-General to prepare for the Social Commission at its thirteenth session and for the Council at its thirty-second session (1961) a report on the world social situation, including, in part I, a brief survey of major trends in the social situation and, in part II, a study of balanced social and economic development. The present report is therefore organized rather differently from previous reports in this series, which have dealt either with social conditions and trends or with programmes adopted to improve social conditions.

The survey of trends presented in part I is in the nature of an interim report between the 1957 *Report on the World Social Situation* and the next full report on this subject, due in 1963. It consists of a single chapter on recent social trends throughout the world and in accordance with the pattern established in previous reports, covers changes in different social fields such as health, education, food and nutrition, housing, conditions of work and employment, refugees, income and consumption.

In view of the importance attached to the problem of the interrelation of social and economic development,[1] the rest of the report (part II) is devoted to an examination of this subject. In undertaking the study of balanced social and economic development, the Secretary-General is aware that there cannot be a rigid theoretical conception of " balance " applicable to a variety of countries at different stages of development. As far as possible, an empirical approach has therefore been adopted.

Chapter II takes up the question of the interrelations of economic and social development and the problem of the definition of " balanced " development. This is followed by a chapter on the actual patterns of development in different countries as revealed by various social and economic indicators. Chapter IV presents data on allocations for social and economic purposes in a number of countries, and discusses the problems involved in obtaining reliable expenditure data. The next chapter deals with methods of co-ordinating and integrating economic and social programmes, including administrative arrangements relevant to such co-ordination. The final chapter (chapter VI) briefly lists certain general conclusions.

Several country case studies of planning for balanced social and economic development are being issued separately. These case studies, as well as others, have constituted one of the sources for the text of the various chapters, and also serve to illustrate in more detail statements that are incorporated, in a more general form, in the body of the report.

In addition to case studies, another source for the preparation of the report has been the replies submitted by several Governments to the circular note sent by the Secretary-General requesting information on difficulties encountered and experience gained in the implementation of programmes of social development.[2] A more extensive use of government replies was not possible in the present report;[3] they are, however, available in the files of the United Nations Bureau of Social Affairs and may be consulted by interested governmental or non-governmental agencies.

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[1] The General Assembly, the Economic and Social Council and the Social Commission have in recent years repeatedly emphasized the importance of balanced social and economic development and have adopted a number of resolutions reflecting this interest. The relevant resolutions are listed in the second footnote in chapter II.

[2] This note was sent to Member Governments in accordance with resolution 731 C (XXVIII) of the Economic and Social Council.

[3] The material will of course be used, as appropriate, in future reports in this series.

This report has been prepared by the Bureau of Social Affairs with the co-operation of the Statistical Office of the United Nations, the International Labour Office, the Food and Agriculture Organization of the United Nations, the United Nations Educational, Scientific and Cultural Organization, and the World Health Organization. Materials contributed by the specialized agencies have been used in the preparation of part I of the report. Certain materials used in papers prepared by the Bureau of Social Affairs for the fifth session of the Working Party on Economic Development and Planning of the Economic Commission for Asia and the Far East, held in Bangkok, from 15 to 26 September 1959, have also been incorporated in the present report. Finally, attention is called to the Report of the Expert Working Group on Social Aspects of Economic Development in Latin America, which met in Mexico City from 12 to 21 December 1960.[4] This report presents conclusions relevant to many of the questions discussed in the present report.

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[4] United Nations, ST/ECLA/CONF.6/L.2/Rev.1.

PART I

Chapter I

RECENT TRENDS IN THE WORLD SOCIAL SITUATION

Introduction

The present chapter summarizes major trends since 1954-1955, the closing years of the period discussed in the 1957 *Report on the World Social Situation.*[1] Important changes are not to be expected over a four- or five-year period in all of the subjects covered in the 1957 report, and not all of the changes that have occurred can be detected or measured through available data. Some of the most important indicators of social trends — life expectancies, literacy rates, composition of the labour force — are assessed through censuses that are generally conducted at ten-year intervals. The majority of countries are taking such censuses in 1960 or 1961, and at least a two-year lag can be expected before full publication of the findings. Thus, the present chapter has little or nothing to say about these subjects; also, when trends that have been discussed in detail in earlier reports appear to be continuing without important change, this is stated briefly, without duplicating the earlier material. The task of making a systematic statistical coverage of social questions is reserved for the 1963 *Report on the World Social Situation* and the accompanying *Compendium of Social Statistics.*

An incomplete and even misleading picture would be given if the discussion were confined to questions for which statistical evidence is at hand, or if it stopped short at the most recent date covered by statistics — usually 1958 or 1959; or if it were confined to the social implications of strictly "social" trends. To a very large extent, the emerging problems of social policy today derive from rapid changes in the economic, demographic, and political situations.

Some of these changes have a long-term character. In particular, the accelerating growth of world population and the increasing concentration of this population in cities continue to be phenomena of overwhelming importance, although the present chapter can add little to what has been said about them in earlier reports. During 1961, the population of the world will pass the 3,000 million line. The annual increase is now between 45 and 55 millions, while the rate of increase has risen from about 1 per cent in the years before the Second World War to a value between 1.6 and 1.9 per cent, and is still rising. Preliminary data from some of the censuses carried out around 1960 indicate that it may even be necessary to revise upward present estimates of the rate of increase.

In most of the economically developed countries during the period under review levels of employment, income, and private consumption have remained high or have risen, with a few setbacks. Prices have risen to a limited extent, and uneasiness over long-term inflationary pressures has continued, but the problems of various groups struggling to maintain or increase their share of the national income have been less prominent during these years than in more inflationary periods of the past. The gap between farm and non-farm incomes has, however, widened in several countries. Also, while aged persons living on fixed retirement incomes or personal savings have not suffered as much from general inflation as in certain periods of the past, another aspect of rising costs in connexion with this group has come to the fore, namely the fact that the methods of diagnosis and treatment for the degenerative diseases have become increasingly complex and expensive. Medical costs for the aged can, in fact, be extremely high if the best available resources are brought to bear on each case of sickness, whether these costs are borne by the individual or by social security, and they can be expected to increase as further scientific advances are made and as the number of the aged continues to grow as a result of these advances. Given such costs, the practice is often followed of saving on matters that are not so central from the medical point of view, such as the environment and comforts provided for the aged patient, with the result that the additional years that modern society can bestow are often unhappy ones.

Two short-term trends or sudden upheavals affecting many of the less developed countries during the same period deserve particular attention. One is mainly economic in origin, the other mainly political, but both have an impact on all aspects of socio-economic progress.

(1) Many of the less developed countries in the period covered by the present report have been faced with balance-of-payments crises or broader economic difficulties. A number of them, particularly in Latin America, have turned to drastic policies of "austerity" or "stabilization", and others have made more limited changes in their spending policies. The most common

[1] United Nations publicat on, Sales No.: 57.IV.3.

reason has been the deteriorating price position of most of the foods and raw materials that these countries export, in relation to the manufactured goods they import, although over-optimistic and poorly planned government expenditures, deficit financing, chronic inflation, drying up of the flow of investment funds from abroad, and many other factors have entered into the picture to varying degrees in different countries.

Economists as well as political leaders are far from agreement about the *economic* advisability of the more drastic austerity measures, with one group arguing for high developmental spending at all costs. More commonly, however, the austerity policies are looked upon as a prerequisite to sound development through the most efficient use of resources, and the influence of such intergovernmental agencies as the International Monetary Fund has been an important factor behind their adoption.

On the *social* side, the austerity policies have not generally resulted in any cutting of expenditures on the programmes that are now considered to have the most direct bearing on development — principally education and public health — although they may in some cases have prevented expansion of these programmes. Some of them have been accompanied by government pledges to give more attention to the previously neglected rural population and to food production. They have, however, resulted in the abandonment or modification of various measures that bolstered the incomes, levels of consumption, and job opportunities of urban workers during previous years, at a time when these groups, and particularly the unskilled recent additions to the labour force, are feeling the direct effects of the slowing down of urban economic growth. Government-decreed " escalator " wage increases to match rising costs of living have often been replaced by wage freezes. Measures intended to stabilize the prices of consumer goods (price controls, subsidies, favourable exchange rates for certain imports, direct sales to workers in state-owned stores) have often been modified or abandoned. Transport fares in some cities have been raised after being fixed at artificially low levels for many years. The size of government staffs has been frozen or cut, employment in public construction programmes has declined, and legal requirements that private employers keep superfluous workers on their payrolls have been relaxed.

These measures, in the countries in question, have clashed directly with the " revolution of rising expectations " that has been taking place among the masses of the population, resulting in a widespread feeling that they are being required to assume an unfair burden of sacrifices. In fact, most of the austerity programmes include features affecting the wealthier classes — restrictions on imports of luxury or high-cost goods such as automobiles, reform of the tax system, prevention of tax evasion, etc. — but there are indications from at least a few countries that these measures are less vigorously followed up than the ones previously mentioned. The immediate future may depend on the extent to which the masses of the population will accept temporary frustrations without violent protest, but the longer-term future depends on the extent to which national policies succeed in stimulating economic growth at a high enough rate to produce a visible improvement in their well-being. A recent meeting of economists, sociologists, and political scientists to discuss the social aspects of economic development in Latin America agreed that sound development requires not only more effective policy decisions but also more popular support for development policies than has yet been attained and a more equitable distribution of the fruits of development to justify such support.[2]

(2) During the period since 1958 there has been a new transformation of colonial territories into independent States, matching that which followed the Second World War. The newly independent States (mainly in Africa) are in general much smaller in territory and population, poorer in economic and educational resources, and more lacking in political and administrative experience than were the mainly Asian and Middle Eastern States that became independent in the 1940's. The attainment of independence has inevitably been accompanied, on the one hand, by an upsurge of popular demands and expectations for education, social services and higher levels of living; on the other, by disruption (ranging from slight to practically total) of the existing administrative machinery and the social services, as well as many of the business houses, banks, industries, transport systems, etc., previously staffed at the managerial and technical levels by Europeans.

The countries in question have an urgent need for technical advice of all kinds, coupled with an understandable determination to make their own decisions and repel any hint of tutelage. Their educational systems are rapidly expanding, but as yet with inadequate planning and with some confusion over the continued applicability of the priorities set up by the previous administrations. Africa is also weak in basic social and demographic information needed for planning, in spite of considerable progress in censuses and social surveys during the past five years, so that some of the new countries can do little more than guess even the size of the labour force or the number of school-age children. The next few years will be a period of very active social experimentation and adaptation of the institutions borrowed from abroad to local conditions and new goals. There will clearly be a need for regional co-operation in this process, including the creation of regional institutions for research and higher education.

Health [3]

Prevalence of illnesses

The major health problems of the world today may be conveniently divided into three groups: (1) The quarantinable diseases whose incidence is now quite limited, but which represent a continuing menace that must be

[2] United Nations, " Report of the Expert Working Group on Social Aspects of Economic Development in Latin America " (ST/ECLA/CONF.6/L.2/Rev.1).

[3] The most important sources for detailed statistical information and analyses of world health trends are the following publi-

watched and subjected to international controls; (2) The mass infectious diseases that are still the main causes of illness and death in the less developed countries; (3) The so-called " degenerative diseases " that become the major health problems once the first two groups are brought under control and the expectation of life passes above sixty years.

In the first group are the six particularly dangerous quarantinable diseases: plague, cholera, yellow fever, typhus, relapsing fever, and smallpox. The fear of their international spread is so strong that about 170 States and territories have accepted International Sanitary Regulations governing their control, and the few States not bound by this international agreement do, in fact, observe most of its provisions. While not all cases of these diseases are reported, reporting is improving, and thus the information which becomes available is more reliable.

Plague. In 1955, cases were reported from sixteen countries, in 1959 from only eleven, and the number of reported cases decreased from 1,413 in 1955 to 289 in 1959.

Cholera. Both in 1955 and 1959, cases were reported from four countries, all in Asia, but the number of cases reported in India declined from about 26,000 to less than 15,000. In Pakistan (East) the number of cases reported (about 20,000 in 1959) increased somewhat, owing perhaps in part to improved notification. An epidemic that began in Thailand in 1958 ended in 1959.

Yellow fever was reported by five countries in Africa in 1955 and by four in 1959, including Ethiopia and the Sudan, at whose border an epidemic occurred. In Latin America, the number of countries reporting cases increased from five to six, but the total number of reported cases fell from seventy-five to thirty.

Typhus (louse borne) was reported in 1955 in thirty-five countries and in 1959 in only twenty-three. Although the total number of reported cases did not change materially, the smaller number of countries where this disease still occurs reduces the danger of epidemic outbreaks.

The same observation may apply to *relapsing fever.* The number of countries fell from twenty-nine in 1955 to sixteen in 1959 (including nine in Africa), while the total number of cases increased; an increase that may be attributed to better reporting.

Smallpox. Since a resolution of the Eleventh World Health Assembly (1958) noted that " smallpox still remains a very widespread and dangerous infectious disease and that in many regions of the world there exist endemic foci of this disease constituting a permanent threat of its propagation . . . ", control activities have increased and some progress has been made toward the distant goal of world-wide eradication. In 1955, smallpox cases were reported from sixty-five countries, in 1959 from sixty-three. The number of reported cases, however, decreased more sharply than the number of countries where the disease occurred.

	1955	*1959*
Africa	23,442	14,731
America	8,421	2,979
Asia	65,116	57,547
Europe	85	12
	97,064	75,269

With the partial exception of smallpox, the quarantinable diseases have become more limited in their geographical prevalence, and this is a definite gain in world health. The main contributing factor may be assumed to be intense control measures carried out through extended health services.

As long as even a few isolated cases of these diseases linger in the hinterlands of Africa and Asia, however, the danger of new mass outbreaks is present, if political turmoil or other factors lead to a breakdown of the controls. This has recently been seen in the Congo (Leopoldville); in the interval between the hurried departure of most Belgian physicians and the arrival of internationally recruited public health personnel, local outbreaks of smallpox and plague were reported.

The *mass infectious diseases* are numerically many times more important than those discussed above. For some countries where these diseases prevail, rough estimates of changes in their incidence and geographical spread can be made, but most such estimates have no reliable statistical basis.

Malaria is still the major health problem in tropical areas, and the World Eradication Programme continues to attack it intensively. " In December 1959 about 568 million people were protected by operations which had reached the attack or consolidation phase, while preparatory or pre-eradication work was being undertaken for an area inhabited by about 168 million people". Reports that anopheles mosquitoes were developing resistance to insecticides were being received with " unpleasant frequency ", but the most important problem faced by the programme is " uncertainty whether adequate funds will be forthcoming for the continuation of the work ".[4] Information from countries totalling about three-quarters of the world's population indicates that the estimated 250 million malaria cases of 1950 had probably fallen by 30 per cent by 1955, and by a further 20 per cent in 1957 if compared to 1955 data.

Rough estimates of the numbers of persons throughout the world suffering from other mass diseases (yaws, bilharziasis, filariasis, trachoma, leprosy, trypanosomiasis) were presented in the 1957 *Report on the World*

cations of the World Health Organization: *Annual Epidemiological and Vital Statistics* (latest edition, for the year 1957, published July 1960); *Epidemiological and Vital Statistics Report* (monthly publication); *The First Ten Years of the World Health Organization* (1958), chap. 12-34; *Annual Report of the Director-General to the World Health Assembly and to the United Nations* (Official Records of the World Health Organization, Nos. 67, 75, 82, 90, 98).

[4] World Health Organization, *The Work of WHO 1959; Annual Report of the Director-General to the World Health Assembly and to the United Nations*, p. v, and p. 4.

Social Situation. A quantitative estimate of recent changes in the global picture of these diseases is not available, but the scale of campaigns against them would suggest that their prevalence has declined during the period under review. Over the last ten years, for example, half of the 200 millions people living in yaws-endemic areas have been examined and, where necessary, treated.

The number of known cases of these diseases, of course, increases considerably when a population has access to treatment and finds out that the methods actually work ; many formerly hidden cases turn up for treatment. In a leprosy project in Asian countries, for example, the initial estimated number of cases was about 1,000, but when work was actually carried out in 1955 and 1956, 5,000 cases were detected and treated. While the probable number of leprosy cases is small compared with some other mass diseases, this is one of the most expensive to treat and most costly in terms of the disabilities it causes. Probably about 2 million leprosy patients are registered throughout the world, about three quarters of whom are under treatment, but WHO estimates that the total number of sufferers is between 10 and 12 millions.[5]

The diseases discussed above are important, as causes of sickness or death, mainly in the economically less developed regions.

Continuing progress has been made against poliomyelitis, particularly in the economically developed countries. The chief event here has been the rapid advance in the use of live attenuated poliovirus vaccines, administered orally; extensive field studies have been carried out in many countries, notably in the Union of Soviet Socialist Republics, where the total number vaccinated by this method was well over 50,000,000 by mid-summer 1960, with an impressive record of safety and strong indications of efficiency.[6] At the same time, venereal syphilis and gonorrhoea, diseases which after the advent of penicillin seemed to be declining rapidly in importance, have in several countries shown a disturbing recrudescence.

The major health problems of the economically developed countries continue to be the " degenerative " diseases of the upper age groups, especially heart disease and cancer. Important progress is being made in research into the aetiology of these diseases, but this has not as yet appreciably altered their incidence, and the findings — many of which have not received final confirmation — cannot be summarized adequately in a brief review.

Medical care

Data on the ratio of persons to hospital beds in the 1957 *Report on the World Social Situation* showed general improvement between 1948 and 1952. Data up to 1957 now available show that the gains have continued; but not at a very high rate; the number of hospital beds increased by about 13 per cent, compared with a world population increase of about 8 per cent during the same years.

Region	*Increase from 1952 to 1957 in number of beds*	*Percentage increase*
Africa	57,730	26
Asia and Far East	370,216	51
Middle East and North Africa	51,445	33
Latin America and Caribbean	97,185	19
Europe (excluding USSR)	439,640	10
North America and Oceania	40,600	2
TOTAL	1,056,816	13

The percentage increases are largest in the less developed regions but these comparative percentage gains are not as significant as they might appear, in view of the different bases for the figures. The relatively small percentage increase in Europe resulted in a larger quantitative expansion than the high percentage increase in Asia. In the USSR, the number of beds increased, between 1950 and 1959, by 609,000 (from 1,011,000 in 1950 to 1,620,000 in 1959, or from fifty-six per 10,000 persons to seventy-six).[7]

Between 1950 and 1958, the number of physicians in 186 countries and territories increased by about 39 per cent, from 1,245,000 to 1,733,000.

FOOD PRODUCTION AND NUTRITION [8]

By the opening of the period under review, the economically advanced regions had recovered from the setbacks to food production originating in the Second World War to such an extent that they were accumulating surpluses of certain commodities. In most other regions food production had roughly kept pace with population growth. In the Far East, long the most poorly fed region of the world, however, per capita production was still well below pre-war. This region had regained its pre-war consumption level (in quantitative but not in qualitative terms) only by changing from a net exporter to a net importer of foods ; its per capita consumption of animal protein still showed a downward trend.

Since 1954-55 the absolute amount of food production has increased in all regions, with the possible exception of Africa, and, as the following table indicates, most of the regions have made at least limited per capita gains. The gap between the regions with food surpluses and those with food deficits, however, has not narrowed.[9]

[5] *Ibid.*, p. 17.

[6] World Health Organization, *The Work of WHO 1960, Annual Report of the Director-General to the World Health Assembly and to the United Nations.*

[7] Communication from Government of USSR, dated 29 July 1960.

[8] This section is based on FAO's annual reports on *The State of Food and Agriculture* for 1959 and 1960, in which detailed statistical data may be found.

[9] In July 1960, FAO launched a Freedom-from-Hunger Campaign which seeks to focus world attention on this continuing problem. A plan by which needy areas are to receive surplus foods on favourable terms, approved by the United Nations General Assembly and by FAO, is to go into effect in 1961.

INDICES OF PER CAPITA FOOD PRODUCTION (AVERAGE 1952/53 - 1956/57 = 100)

	Pre-war average	*1954/55*	*1955/56*	*1956/57*	*1957/58*	*1958/59*	*1959/60*
Western Europe	93	101	102	102	105	106	109
Eastern Europe and USSR	85	95	103	112	114	123	122
Northern America	87	97	99	101	96	102	101
Oceania	110	99	101	95	92	105	99
Latin America	103	101	99	103	103	103	100
Far East (excluding China (mainland))	108	100	102	104	100	103	105
Middle East	95	97	98	105	105	105	103
Africa	96	100	99	101	96	96	92
ALL ABOVE REGIONS	95	98	101	104	103	107	107

For China (mainland) which is not included in the above indices, substantial rises in production were announced both in 1958/59 and in 1959/60, but droughts and floods are reported to have caused a serious setback in the most recent year.

The regional indices conceal wide differences in individual countries. According to FAO calculations, per capita food production registered notable gains during the period under review in the following twelve among forty-eight selected countries.[10]

INDICES OF PER CAPITA FOOD PRODUCTION (AVERAGE 1952/53 - 1956/57 = 100)

	1954/55	*1955/56*	*1956/57*	*1957/58*	*1958/59 (Preliminary)*
Austria	96	103	108	110	121
Greece	100	103	110	123	120
Italy	96	105	104	102	114
Yugoslavia	93	125	103	137	117
Brazil	101	103	111	115	119
Cuba	94	98	111	113	116
Mexico	103	106	113	120	123
China: Taiwan	100	100	107	113	117
Japan	94	114	110	115	119
Israel	101	103	122	126	130
Turkey	86	100	106	111	123
Tunisia	103	80	113	99	137

In seven among the forty-eight countries food production failed to keep pace with population growth:

Portugal	104	102	101	105	99
Sweden	101	91	101	100	94
Peru	101	102	95	97	95
Uruguay	101	99	95	100	94
Algeria	106	95	110	98	95
Morocco: former French Zone	106	100	101	85	99

The dependence of agriculture on weather conditions can mean wide year-to-year fluctuations in production, unrelated to long-term trends, and consequently great uncertainty and variability of income and consumption. Adverse weather may even affect the production of a whole region, as happened in the Far East in 1957/58. The widest fluctuations occur in areas with particularly uncertain rainfall, including north-western Africa, parts of the Middle East, and certain rice-growing countries in South-East Asia. In the above table, Algeria, Tunisia and Morocco show plainly the impact of droughts in 1955/56 and 1957/58. In the so-called "fertile crescent" comprising Iraq, Jordan, Lebanon, and the Syrian region of the United Arab Republic, fluctuations have probably been even greater; droughts have now caused crop failures for two successive seasons and appear likely to do the same in 1960/61.[11] In Latin America, north-east Brazil suffered one of its recurrent droughts, accompanied by hunger and mass migration, in 1958,

[10] See annex table 1 B in *The State of Food and Agriculture, 1960*, op. cit.

[11] The following statistics on production of wheat (in thousands of tons) show the very wide fluctuations in crops found in this region :

	1954	*1955*	*1956*	*1957*	*1958*	*1959 (Preliminary)*
Iraq	1,160	453	776	1,118	754	671
Syria	965	438	1,051	1,354	562	632

Economic Development in the Middle East, 1958-59, United Nations publication, Sales No. : 60.II.C.2.

while in 1959, production in Uruguay and neighbouring parts of Brazil and Argentina suffered from floods.

The indices also conceal very important differences in the character of the production increases in the different regions and in the factors behind the increases. These differences represent a continuation of trends discussed in chapter IV of the 1957 *Report on the World Social Situation.*

(1) In the regions of Western Europe, North America and Oceania, where livestock products already formed a high proportion of food production at the beginning of the period, the increased demand resulting from rising incomes has gone mainly to these products and they have risen more rapidly than agricultural production as a whole. In the less developed regions, on the other hand, although the nutritional deficiencies call for a greatly increased consumption of livestock products, purchasing power is insufficient for a high level of effective demand for these more expensive foods, and livestock production has been increasing more slowly than total production. The basic grains and starchy roots have been rising more rapidly than production as a whole in both the Far East and the Middle East, more slowly in Latin America, and also in Africa where the agricultural products rising most rapidly have been the residual group including sugar, beverage crops, oil crops, etc., a high proportion of which are grown for export. (It should be noted, however, that statistics on basic food crops in Africa are especially poor.) Per capita demand for basic calorie foods in the higher-income countries seems generally to have been satiated or even to be declining; although production of such crops in many of the countries is still increasing, a large part of the output is now used for animal feeding or is accumulating in surplus stocks.

(2) In the economically more advanced regions, production increases have resulted mainly from higher yields per unit of area cultivated; in many cases production has expanded in spite of a decline in area. In the less developed regions, while there has been some limited increase in yields per hectare, the larger part of the increase in output of major crops has resulted from extension of the cultivated area (including double cropping). Rice is the major exception among the basic food crops; rice yields are estimated to have increased faster than area planted to rice in all regions except Latin America.

Indices of national food production do not reflect closely the level of supplies for human consumption, as they take no account of changes in exports and imports. In general, information on food supplies available for consumption is very imperfect, especially for the less developed countries. FAO, on the basis of food balance sheets calculated for forty-two countries, estimates that during recent years there have been fairly steady increases in the intake both of calories and of animal protein in the countries of Europe, North America, and Oceania. In the other regions increases in calorie intakes have been limited, while in many countries average intakes of animal protein hardly reach the pre-war level.[12]

Levels of nutrition in the Far East remain the lowest in the world. The South-East Asia Regional Director of WHO, in 1960, singled out nutrition as the " most distressing public health problem " of the region. Although there have been encouraging increases in per capita domestic production since 1954/55, the situation is still worse than what it was a quarter of a century ago; the limited dietary gains have depended to a large extent on increase of food imports, derived in part from the surplus production of rich industrial nations. Consumption of animal protein in this region is particularly low, and the two countries with lowest consumption, India and Pakistan, have barely maintained previous levels of six and eight grammes daily per capita. The Middle East has apparently maintained previous nutritional levels by becoming a net importer of food, largely to offset unfavourable climatic conditions during the last few years. In Africa per capita food supplies seem to have declined from the level of 1953-56. The most recent FAO survey of the situation in Africa, while emphasizing the scantiness of information on consumption, concludes that consumption is now under the low pre-war level, and that this trend is all the more serious in that a reduction in supplies tends to be unevenly distributed over the different socio-economic groups and even within the family; the diets of women and young children are particularly inadequate.[13] In Latin America as a whole, food supplies are keeping pace with population growth (although not with the new demands stemming from rising income levels and urbanization) while some countries (for example, Brazil and Mexico) have forged ahead.

Data on the nutritional situation of different population groups within individual countries are too scanty to provide any evidence on trends. It is clear that the fact that a country's calorie intake, assessed from the food balance sheet, is close to requirements does not mean that part of the population may not be suffering from under-nourishment. Even in countries where average consumption levels are in excess of estimated requirements, the food intakes of some of the poorer groups of the population can be far below minimum needs for health and labour efficiency.

Housing

During the period under review, the rate of construction of new housing in most countries of Europe and North America was high enough to reduce but not to overcome the housing shortages that date from the decades of depression and war. To varying degrees these countries have been able to turn more of their attention from the general quantitative shortage to the housing

[12] *The State of Food and Agriculture 1960*, op. cit., annex tables 14 A and 14 B.

[13] Food and Agriculture Organization, " Review of the Food and Agricultural Situation in Africa ", prepared for the third session of the Economic Commission for Africa (E/CN.14/62).

needs of special groups and to the needs for replacement of sub-standard dwellings.

In western and central Europe the number of dwellings completed per 1,000 inhabitants averaged over 5.0 annually in all countries except Ireland since 1954.[14] The rates fell off to some extent in 1958, but recovered in 1959 and were expected to rise again in 1960. The Federal Republic of Germany, which had a particularly severe housing shortage in the early 1950's, was in the lead with more than ten new dwellings per 1,000 inhabitants per year, followed by Sweden with more than eight, the Netherlands and Norway with more than seven, and France, which rose above the seven per 1,000 level in 1959. These rates of construction were high enough to meet the needs of new families and to permit some reduction in overcrowding; a good deal of the existing stock of housing, however, needs replacement because of age and deterioration, and an increase in the rate of formation of new families is probable during the 1960's as the large groups born during the late 1940's come of age. Practically none of the countries in western and central Europe can afford to reduce their rates of housing construction in the near future.

In the countries of southern Europe both the situation and the trends are less favourable. These countries have a chronic housing shortage, with average density of occupation at least 50 per cent higher than in western and central Europe. Rates of construction of new dwellings in Portugal and Spain, however, are below 4.0 per 1,000 inhabitants "insufficient to meet minimum annual housing needs, quite apart from the elimination of shortages and needs arising from international migration". Greece and Italy have more satisfactory rates (6.0 per 1,000 or over) but in Greece a large proportion of the new dwellings are "small rudimentary structures built in the rural areas by the owners".[15]

In eastern Europe, shortages at the beginning of the period under review were particularly severe, because of wartime devastation, low pre-war housing standards and, in some countries, the relatively low priority previously given to housing in public investment plans. Except in the USSR, recent construction rates have not been high enough to indicate any rapid improvement. The USSR, however, has considerably increased its housing investment in recent years and attained a higher rate of new housing construction than any other country for which statistics are available; this rate has risen from 7.0 per 1,000 inhabitants in 1954 to 10.8 in 1957 and 14.4 in 1959. The Government of the USSR in 1957 set as a goal the elimination of the shortage of workers' housing throughout the country within the next ten or twelve years. This goal implies a further rise in the level of construction; in the period 1959-65 nearly 15 million dwellings are to be built in the cities and urban-type communities, while an additional 7 million dwellings are to be built by collective farmers and rural professionals and technicians.[16]

The United States rate of house-building in recent years has been between seven and nine per 1,000 inhabitants; by 1959 its over-all quantitative shortage of housing had been "virtually eliminated".[17] "Most of the cities, however, continue to be troubled by particular kinds of shortages and maladjustments between supply and demand: there are needs for more dwellings for rental to middle-income families and families with several children; for more dwellings adapted to the needs of elderly people; and for more dwellings other than slum tenements accessible to low-income migrants.

In western Europe and North America the period has seen continually rising costs of construction and land, although construction costs may have levelled off in 1959. In eastern Europe, including the USSR, there has been some tendency for building costs to decline, largely owing to industrialization of methods and rising productivity of labour.[18]

In many of the western European and North American countries, as the most urgent shortages have been met, there has been a shift from public and semi-public to private financing, and a tendency to concentrate public funds to a greater extent on slum clearance, housing for families with incomes too low to meet market prices, and housing for groups with special needs, particularly the aged. In the eastern European countries there have been substantial increases in State credits and subsidies, but also a continuation of the trend noted in earlier reports to encourage greater participation by the people in provision of their own housing; in the USSR in 1959, out of new housing totalling 80.4 million square metres of floor space, 53.8 millions were built by State and co-operative organizations and 26.6 millions by urban dwellers at their own expense or with the help of State loans; these figures do not include collective farm housing, which is built mainly by the farmers themselves.[19]

There has also been a fairly general trend in the countries in which private rental housing is important toward the relaxation of rent controls, so as to provide better incentives for private investment in such housing. Only a very few countries, however, notably Belgium and Finland, have entirely or almost entirely eliminated rent controls. In eastern European countries and the USSR, on the contrary, while income levels have risen, rents have been controlled at a level which has required the State to subsidize maintenance and repairs. Yugoslavia abandoned such a policy in January 1960, raising

[14] See *European Housing Trends and Policies in 1959* (United Nations publication, Sales No.: 60.II.E/Min/11) and earlier annual reports in this series. Ireland, with a slightly declining population, has today no quantitative housing problem. Inter-country comparisons of rates of construction have to be made with caution, in view of differing definitions and sizes of dwellings, as well as differing levels of housing at the beginning of the period.

[15] *European Housing Trends and Policies in 1959*, op. cit., p. 13.

[16] Communication from the Government of the USSR, dated 29 July 1960.

[17] *Economic Report of the President*, transmitted to the United States Congress, 20 January 1960.

[18] *European Housing Trends and Policies in 1959*, op. cit., pp. 32-36.

[19] Communication from the Government of the USSR, dated 29 July 1960.

rents to an economic level with compensating increases in salaries and pensions.[20]

Israel has a unique housing problem in the early 1950's, which has been alleviated with the ceasing of mass migration and through heavy public investments in housing. Between 1949 and 1958 public building accounted for 77 per cent of the new dwelling units, and 80 per cent of the dwelling units publicly constructed were destined for new migrants and agricultural settlers, the remainder for special groups such as civil servants, members of the armed forces, and invalids. By the close of the decade it had been possible to eliminate 85 per cent of the temporary shelters and transit camps in which the immigrants had been housed. Israel hopes to close the remainder of these during 1961, and to turn its attention to new housing for the mass of the population.[21]

In the majority of countries in Africa, Asia, the Middle East and Latin America it is unlikely that substantial progress in meeting housing shortages has been made during the period under review. The previously high rates of city growth and migration to the cities have continued, with the probable exceptions of one or two African countries in which recent political events have meant a collapse in urban employment. Public housing construction continues to be on too small a scale to have any significant effect on the situation. In fact, the austerity policies adopted by many of these countries since 1957 have meant a cutting back of investments in urban public housing in favour of more directly productive investments.[22] It can thus be assumed that the urban masses are living in the same intolerable conditions of overcrowding described in the 1957 *Report on the World Social Situation* and that the number of people living under such conditions has increased. A new assessment of quantitative trends, however, will have to await the censuses that most countries are carrying out in 1960 or 1961.[23]

While the urban housing crisis has not been alleviated, there is some reason to believe that rural housing conditions are beginning to change for the better in at least a few areas. Community development and self-help housing programmes are now reaching an important part of the rural population in India, Pakistan, the Philippines and elsewhere with material assistance and advice in improving the traditional methods of construction, in building latrines, digging wells, etc. Rural electrification programmes are beginning to reach the villages in a few countries. Here again, however, censuses or sample surveys will be needed for an assessment of material changes.[24]

Education [25]

The past few years have seen an intensification of the world-wide demand noted in previous reports for more education and for more equitably distributed opportunities for education. These demands have naturally centred on different kinds of education (primary, secondary, technical, higher) in different regions, depending on the circumstances, but almost everywhere educational budgets have risen steadily (by 12 to 14 per cent a year, as an unweighted average). In some countries more than 5 per cent of the national income now goes to education, and the percentage is expected to rise still higher. The conception of education as a productive investment as well as a form of social consumption continues to gain ground, and the debates over educational methods and purposes also continue. One of the most widespread trends thus relates to the future; both the heavy cost of education and the developmental tasks assigned to it have led to a rapid increase in the number of educational plans, regional as well as national; to long-term forecasts of costs and teacher requirements; and to studies of the relationships of different levels of education to each other and to the national economy.

Changes in administration and curricula generally respond to conflicting pressures from several directions; toward centralization and decentralization, toward simplification of the curriculum and toward the introduction of new specialized subjects; toward closer integration of vocational-technical and general education and toward greater separation of the two. Clear-cut continuing trends in these fields of educational policy are hard to identify. Changes in distribution of education by level may be assessed from the table prepared by UNESCO on the opposite page.

In the educationally more advanced regions, enrolment trends at the primary and secondary levels since the mid-1950's have been determined mainly by the shifts in birth rates that occurred during the 1940's and early 1950's.[26] In the majority of European countries, the " bulge " of children resulting from unusually high

[20] *European Housing Trends and Policies in 1959*, op. cit., p. 59.

[21] Israel, *International Seminar Conference on Housing, 4th to 31st May 1960*, sponsored by the Ministry of Labour in co-operation with the Ministry of Social Affairs, Tel-Aviv.

[22] Data in the 1959 *Statistical Yearbook* (United Nations publication, Sales No.: 59.XVII.1, table 123) on new dwelling units completed or on building permits issued up to 1958 show a falling off in construction in several of these countries after 1956 or 1957. The coverage of these statistics and the local factors that may influence year-to-year changes vary too widely, however, to permit the drawing of any general conclusion from them.

[23] The situation in Latin America may change for the better with substantial support for housing to be given from the Special Fund for Social Development provided for at the Bogota Economic Conference of the Americas in 1960.

[24] See *Report on the World Social Situation*, op. cit., pp. 68-69.

[25] The United Nations is planning two survey missions to evaluate self-help housing and related co-operative practices, one in selected countries of Asia, the other in Africa.

[26] This section is based mainly on reports submitted by educational authorities to recent International Conferences on Public Education, which are incorporated in the UNESCO — I.B.E. International Yearbooks of Education, and on the reports of regional meetings organized by UNESCO during 1960 for Tropical Africa, Asia, the Arab States, and Latin America.

PERCENTAGE OF ESTIMATED SCHOOL ENROLMENT AT EACH LEVEL OF EDUCATION: WORLD, CONTINENTS AND REGIONS

Continent and region	Enrolment by level 1953/54				Enrolment by level 1957/58			
	First (Primary)	Second (Post-primary)	Third (Higher)	Total	First (Primary)	Second (Post-primary)	Third (Higher)	Total
World total	75.4	22.1	2.5	100.0	76.3	20.8	2.9	100.0
Africa	89.1	10.1	0.8	100.0	90.7	8.5	0.8	100.0
Northern Africa	76.6	21.2	2.2	100.0	82.4	15.5	2.1	100.0
Middle and Southern Africa	93.7	6.0	0.3	100.0	93.6	6.1	0.3	100.0
America	78.3	17.0	4.7	100.0	76.8	18.0	5.2	100.0
Northern America	73.0	20.8	6.2	100.0	71.1	22.0	6.9	100.0
Middle America	91.7	6.5	1.8	100.0	91.0	7.2	1.8	100.0
South America	86.2	11.3	2.0	100.0	84.8	13.1	2.1	100.0
Asia (excluding USSR)	83.1	15.6	1.3	100.0	81.6	16.8	1.6	100.0
South West Asia	87.9	11.0	1.1	100.0	85.5	13.1	1.4	100.0
South Central Asia	76.3	21.9	1.8	100.0	75.4	22.5	2.1	100.0
South East Asia	90.3	8.4	1.3	100.0	88.1	10.4	1.5	100.0
East Asia	84.3	14.7	1.0	100.0	82.7	15.9	1.4	100.0
Europe (excluding USSR)	74.1	23.6	2.3	100.0	71.6	25.9	2.5	100.0
Northern and Western Europe	72.0	26.0	2.0	100.0	68.8	28.9	2.3	100.0
Central Europe	70.9	26.8	2.3	100.0	68.0	29.2	2.8	100.0
Southern Europe	80.5	17.0	2.5	100.0	79.1	18.3	2.6	100.0
Oceania	77.5	20.2	2.3	100.0	76.1	21.5	2.4	100.0
Australia and New Zealand	75.7	21.6	2.7	100.0	73.6	23.7	2.7	100.0
Pacific Islands	89.0	10.8	0.2	100.0	92.4	7.4	0.2	100.0
USSR	36.4	58.9	4.7	100.0	52.1	41.5	6.4	100.0

Source: UNESCO, *World Survey of Education*, vol. III (in press).

birth rates in the years immediately following the Second World War has moved upward from the primary to the post-primary grades, so that the share of post-primary in total enrolment has increased and reports of shortages of teachers and school buildings now come mainly from the post-primary schools. Since technical subjects, sciences, and mathematics are now receiving more attention, there has been a particular scarcity of teachers qualified in these subjects. The upper secondary (non-compulsory) years have also been affected by continuing demands for prolongation of education for all children. France has been able to extend its period of compulsory education (to age sixteen) effective January 1959. The United Kingdom, however, has postponed action on the recommendation of the National Advisory Council for Education in England that compulsory full-time education be extended to age sixteen, on the ground of teacher shortage.

In the countries of North America and Oceania, birth rates did not recede after their rise in the mid-1940's, and consequently both primary and post-primary enrolments have continued to increase.

In the above regions enrolment in higher institutions has risen steadily, and this rise is expected to accelerate during the next decade; in France a doubling of higher enrolment is predicted, and in the United Kingdom university enrolments will nearly double. Higher education is more expensive than the lower levels, both in direct costs per student and in costs involved in postponement of the students' entry into the labour force. Under favourable conditions its contribution to the student's value to society and his eventual earning power by far exceeds this expense, but a mere expansion of the present pattern of higher education in a rapidly changing world will not make the maximum contribution. Rising enrolments are already straining the capacities of the systems and it is generally agreed that the pressure for mass higher education requires better answers than have yet been found to the questions of what is to be taught, in what kinds of institutions, how students are to be selected and maintained, how enough capable teachers are to be found, and how the costs are to be met.

In the USSR, also, enrolment trends have been influenced by the wartime slump in birth rates and their post-war recovery. Here the abnormally small age groups born between 1942 and 1946 have moved upward through the school system, so that the ratio of enrolment

in grades 1–7 to enrolment in grades 8–10 has risen substantially. Enrolment in the first four grades of school rose from 13.7 millions in 1955/56 to 17.8 millions in 1958/59, while enrolment in grades 5–7 fell from 10.1 millions to 8.9 millions and enrolment in grades 8–10 fell from 6.2 millions to 4.7 millions. Meanwhile, following a national discussion of the purposes of post-primary education, provision was made for a general transition, beginning with the 1959-60 academic year, from seven-year to eight-year compulsory education for all children, and for the establishment of polytechnic secondary schools providing practical training for children completing the eight-year school. Since 1956, a network of boarding schools has also been created which is expected to provide more intensive education paralleling that given in the eight-year school as well as in higher grades. A continued expansion of boarding schools and of schools with extended hours is expected. Throughout the educational system there has been a renewed emphasis on the maintenance of close ties between the schools and productive work, both through the content of full-time schooling and through evening and correspondence courses for workers. Enrolment in specialized secondary institutions changed only slightly, from 1,960,000 to 1,907,000 between 1955/56 and 1959/60, while higher enrolment rose from 1,867,000 to 2,260,000, but in both of these types of institution the ratio of correspondence and evening students to full-time day students rose sharply.[27]

The other regions, with the exceptions of a few educationally advanced countries such as Israel and Japan, have had two main educational pre-occupations during the past few years: first, the universalization of primary education within a fixed period; second, the expansion and acceleration of training of the many types of specialists needed for socio-economic development and the running of independent States.

A series of regional meetings organized by UNESCO during 1960 tried to assess progress and future requirements. Although the terms of reference of these meetings, the statistical material presented to them, and the educational yardsticks selected by them for measurement of progress are not uniform, they provide the most authoritative and up-to-date studies of trends in most of the countries usually grouped as "underdeveloped". In all of the regions the proportion of school-age children enrolled in school has been rising, although this is not true of all countries within the regions. The combination of low per capita incomes with high and rapidly growing school age populations, however, has led several of the regional meetings to the conclusion that universal primary education cannot be attained in many of the countries within a reasonable time, unless there is large-scale aid from abroad. At the same time, the participants in the meetings have recognized that, during the transitional period of expansion, educational resources are not being used as effectively as they might be: many of the children who enter a school receive an education too short and too poor in quality to do them any good. In the rural schools, in particular, a heavy concentration of enrolment in the first grade (including repeaters and children well above the normal age for school entry) points to this conclusion.

In *Asia* (excluding China, Japan, Turkey, the Asian Republics of the USSR and the Arab countries of South West Asia) total enrolment in primary classes is estimated to have increased from 38.7 millions in 1950/51 to 66.2 millions in 1960 — that is, from about 6.0 per cent of the total population to about 8.5 per cent, or an annual increase of about 7 per cent, about three times as high as the annual increase in the school age population.

As of 1960, Ceylon was the only Asian country other than Japan to have attained a primary enrolment equal to 20 per cent of its population, or practically universal complete primary schooling. Four others (Federation of Malaya, Republic of Korea, Philippines, and Thailand) were above 15 per cent; one (Cambodia) was between 10 and 15; six (Burma, India, Indonesia, Laos, Pakistan, and the Republic of Viet-Nam) were between 5 and 10; two (Afghanistan and Nepal) were below 2 per cent.

The regional meeting concerned with Asia and the Far East proposed as a target the enrolment of at least 20 per cent of the population in all the Asian countries by 1980. This would imply eight years of schooling for all children, the equivalent of the minimum compulsory period now found in most of the educationally advanced countries.[28] The total cost of such a programme over the twenty-year period was later estimated at $US 56 billion, or nearly $3 per inhabitant per year, a sum well above the financial capacities of many of the countries.

In the Arabic-speaking countries of south-west Asia and northern Africa the annual rate of increase in school enrolment during the past decade has been about 10 per cent, or about four times the rate of increase of school-age population. As of 1959, two Arab countries (Jordan and Kuwait) had primary enrolments amounting to slightly more than 10 per cent of their total population; five (Iraq, Lebanon, Libya, Tunisia and the United Arab Republic) were between 8 and 10 per cent; Morocco was between 5 and 6 per cent, Sudan between 2 and 3 per cent, and Saudi Arabia between 1 and 2 per cent. The recent regional meeting did not propose quantitative targets, but noted that the rapidity with which school systems in the region have expanded over the past decade has meant a somewhat unbalanced development in which "there seemed hardly time to stop and consider the structure and organization of the school system as a whole" and in which "the methods and techniques of teaching have apparently changed very little". Furthermore, "it appears that nearly all Arab countries have reached or are approaching the limits of the finance which their governments can possibly allot for

[27] *Narodnoe Khozyaistvo SSR: Statisticheskii Sbornik 1955* and communication from the Government of the USSR, dated 29 July 1960.

[28] UNESCO, "Report on the Regional Meeting of Asian Member States on Primary and Compulsory Education" (UNESCO/ED 173) and report of a survey of Asian primary education needs which was presented to the meeting as a working paper.

education without seriously affecting their plans of development... Taking into consideration that everywhere in the Arab world the demand for more educational facilities rises constantly higher... the financial burden of realizing these educational necessities has already grown beyond the resources of nearly all Arab governments ".[29]

In Africa south of the Sahara, also, advances in enrolment have been rapid. Calculations covering twenty-two States and territories show that, in the period 1955-58, primary enrolment increased more than 10 per cent a year in twelve countries; between 5 and 10 per cent a year in seven others, and less than 5 per cent in only three. The countries with relatively slow rates of primary growth included some in which primary enrolment at the beginning of the period was well above the regional average and in which more rapid growth is now seen at the post-primary level. In spite of the recent gains, however, ratios of enrolment to population remain generally low. In only five of the twenty-two countries did 1958 enrolment amount to as much as 10 per cent of the population. Here, too, the rapidity of expansion has strained the financial resources of many countries and has been accompanied by considerable uneasiness over the quality of education being imparted by untrained teachers.[30]

Latin America since 1956 has been the scene of a UNESCO Major Project for the Extension of Primary School Education. Between 1956 and 1959, primary enrolment increased by about 4 millions, or by a little more than 6 per cent annually, more than twice the rate of growth of school-age population. In Latin America, school enrolment ratios are generally higher than in the Asian and African countries. Five countries (Argentina, Chile, Costa Rica, Panama and Uruguay), according to UNESCO calculations, are now fairly close to universal primary enrolment. In the majority of the other countries over 10 per cent of the population is enrolled in primary school; the lowest national ratio of enrolment to population in the region is about 6 per cent. UNESCO experts believe that the region as a whole could attain universal primary schooling by the end of the present decade — assuming the school age group to be equal to 16 to 18 per cent of the national populations — with only a slight increase, to 7 per cent, in the present annual rate of growth of enrolments. The present rates of growth, however, are uneven both between countries and within countries; the gap between urban and rural schools is probably wider in this region than elsewhere, and the country with the lowest enrolment ratio (Haiti) is also the only one in which enrolment declined between 1956 and 1959.[31]

The second preoccupation mentioned above, that with education and specialized training at the post-primary level, is obviously closely linked to the first. Post-primary education cannot function effectively without an adequate flow of children who have completed primary school education and are qualified to continued their studies, and the primary schools cannot carry out their task without an adequate output of teachers trained at the post-primary or higher levels.

The training of teachers is, next to the securing of funds, the main factor limiting the rate of expansion of primary education. In many countries of the less developed regions the output of teacher-training institutions is increasing more slowly than primary enrolments; consequently, either the ratio of pupils to teachers or the ratio of unqualified to qualified teachers increases. The following table indicates that, in several countries that have not attained universal primary education, the ratio of pupils to teachers has, in fact, increased.

DISTRIBUTION OF NINETY-FOUR COUNTRIES BY PRIMARY ENROLMENT RATIO [a] AND PUPIL-TEACHER RATIO IN PRIMARY SCHOOLS

Primary enrolment ratio	*Number of countries by pupil-teacher ratio*			
	Around 1953		*Around 1957*	
	Less than 34	*34 or more*	*Less than 34*	*34 or more*
60 and over	28	19	27	20
40-59	9	9	8	10
Less than 40	17	12	12	17
Total countries....	54	40	47	47

Source : UNESCO, *World Survey of Education*, vol. III (in press).

[a] Ratio of enrolment in primary schools to the size of the 5-14 year age group.

All the regional meetings mentioned above concluded not only that teacher-training is receiving insufficient attention in national educational programmes, but also that a simple increase in the output of graduates is not an adequate solution; pay and working conditions in the teaching profession are often so poor that many of the graduates seek other employment. A few exceptions have been noted among the Asian countries; the Philippines reports a surplus and the Republic of Korea a sufficiency of trained teachers; here teachers are well paid in relation to other government employees.[32]

General post-primary and higher education in recent years has, in the majority of countries in the less deve-

[29] UNESCO, " Provisional Report on the Needs for Educational Development in Arabic-Speaking Countries " (UNESCO/ED/Arab States/2) and " Report on the Conference of Representatives of Ministries of Education of Arab Member States of UNESCO on the Needs for Educational Development " (UNESCO/ED/Arab States/7/Rev.).

[30] UNESCO, " Provisional Report on the Needs of Tropical Africa in the Field of Primary and Secondary Education " (UNESCO/ED/AFRICA/2) and " Meeting of Ministers and Directors of Education of Tropical African Countries " (UNESCO/ED/174).

[31] " Informe sobre el desarrollo del Proyecto Principal No. 1 " *Proyecto Principal de Educación UNESCO-América Latina, Boletín Trimestral*, Enero-Marzo 1960. This number of the Project's bulletin also reports on the third meeting of the Advisory Committee on Major Project No. 1, held in Mexico City in March 1960.

[32] Report of a survey of Asian primary education needs, op. cit., p. 29, see footnote 28 above.

loped regions, grown more rapidly than primary; in the Arab States, while primary enrolment has doubled, post-primary enrolment has nearly tripled during the past decade. In Africa south of the Sahara the rate of increase in post-primary education has been high, but no higher than the rate of increase of primary education. Here the existing level of post-primary education is particularly low even in relation to low primary enrolments; in fourteen out of the twenty-two African countries covered by UNESCO'S inquiry into educational needs, the ratio of post-primary to primary enrolment was below 5 per cent, while only four had a ratio above 7 per cent. In the other less developed regions, post-primary enrolment is much higher in relation to primary enrolment, but the dividing lines between the levels and the content of post-primary education vary too much to permit meaningful comparisons.

The major problems in post-primary and higher education are qualitative as well as quantitative, and on this subject there is little to add to the discussions in the chapters on education in earlier reports. In short, complaints continue that the post-primary schools are turning out too many would-be clerks, public employees and members of traditional professions for the needs of the economies and too few skilled workers, technicians and qualified supervisors. Complaints are also heard that what little vocational education exists is poorly integrated with present demands and future needs.

Refugees [33]

A solution is now in sight for the long-standing problems of refugees under the United Nations mandate in Europe, but not for the refugee problems of other regions.

In Europe in 1955 there were about 252,000 non-settled refugees within the mandate of the United Nations High Commissioner, including 85,000 living in refugee camps. Although 238,000 new refugees have appeared since then, the number not yet permanently settled at the end of 1960 was expected to be only about 75,000, including some 13,000 in camps.[34] The High Commissioner has declared that the settling of European camp-dwelling refugees under his mandate would be completed early in 1962. The final clearing of the camps will permit concentration on the non-settled refugees outside them. The progress with camp clearance has resulted both from the continuing efforts of the Office of the High Commissioner, and from the special drive made during World Refugee Year (July 1959-June 1960), which not only swelled the funds contributed by the public and by Governments but also brought about a wider readiness on the part of the latter to accept refugees (including the older people and those suffering from disabilities) as immigrants. Progress was also made in resettling an estimated 7,800 refugees of European origin remaining in the Far East.

Since 1954 more than 200,000 refugees have poured into Tunisia and Morocco from Algeria; three-quarters of them are in Tunisia. Most adults are from families of farmers and unskilled workers and, although they are permitted to work, few of them are able to find employment, since the host countries have a surplus of unskilled labour. The League of Red Cross Societies and the Office of the United Nations High Commissioner, in co-operation with the Moroccan and Tunisian Red Crescent Societies, have distributed rations, clothing and blankets among these refugees; they benefit from the educational and health services of the host countries. It is reported that, in spite of their poverty and unemployment, their mental health is considerably better than that of other refugee groups, presumably because they are not isolated in camps, but allowed to share the life of the society that has taken them in.

The situation of the Palestinian Arab refugees remained unchanged during the period under review, and their numbers continued to grow by natural increase. In mid-1960 the United Nations Relief and Works Agency for Palestine Refugees (UNRWA) was providing food rations, medical care or other services for 1,047,437 Arab refugees; the majority of these were maintained at the barest subsistence level, on food rations providing 1,500 calories per day in summer and 1,600 in winter; 422,000 of them lived in UNRWA camps. Here, too, most adults among the refugees were originally farmers or unskilled workers. Because the host countries have an ample supply of farm labour and unskilled labour in general, these adults have remained unemployed, and the number of unemployed is increased each year by 30,000 young adults. UNRWA hopes to provide an increasing proportion of the youth with skills for which there is a demand, but a proposed five-fold increase in the output of vocational and teacher-training schools among the refugees during the next three years will result in only 2,500 additional trained workers per year.[35]

In India and Pakistan the millions of post-partition refugees have gradually been resettled, although the national problems of poverty and underemployment have prevented the process from being satisfactorily completed. Pakistan estimates that more than 150,000 families still awaited permanent resettlement at the end of World Refugee Year.

[33] For details see *Report of the United Nations High Commissioner for Refugees* (A/4378/Rev. 1 and Add. 1); *Report of the Secretary-General on the World Refugee Year* (A/4556); *Report of the Director of the United Nations Relief and Works Agency for Palestine Refugees* (A/4478); and statements made in the Third Committee of the United Nations General Assembly at its fifteenth session.

[34] The High Commissioner estimated the total number of refugees in Europe still requiring protection in 1960 as 870,000; the majority of these, however, were permanently settled in European countries. This number does not include a large number of national refugees in the Federal Republic of Germany, most of whom have been settled and absorbed into the German economy.

[35] Educational services for the refugees are at present more nearly adequate than other aspects of their levels of living; UNRWA-UNESCO schools provide elementary education to all refugee children and the proportion receiving post-primary education is roughly as high as among the children of the host-countries.

There has been a considerable outflow of refugees from mainland China in recent years, the majority of whom are in Hong Kong, with smaller numbers in Macao and other parts of East Asia. In this instance, however, there is no clearcut dividing line between refugees and migrants for economic reasons. The Government of Hong Kong estimates that its population has increased by about one million since 1949 owing to immigration, but does not attempt to determine what proportion are refugees; it states, however, that one-third of the Government's total revenue has been devoted in recent years to meeting the needs of Chinese refugees. Like the Palestinian and Algerian refugees, the Chinese are moving into a society in which they are culturally and linguistically at home, but in which employment opportunities for the unskilled are scarce.

Employment and conditions of work [36]

Employment and unemployment. In the economically more advanced countries, the past decade has been generally characterized by a continuing high level of demand for labour with rising levels of employment (in non-agricultural occupations) matching or exceeding the growth of the labour force, except for temporary setbacks in some countries during the economic recessions of 1953-54 and 1957-58. From 1957 to 1958, while employment actually declined in the United States of America, Canada, and a few countries of western Europe, in the other countries with predominantly private-enterprise patterns of economy the rates of increase only slowed down. Since 1958 (to mid-1960) the higher rates of growth have been resumed. The highest and steadiest rate of increase in this group of countries is shown by the Federal Republic of Germany, where the 1959 index of general level of employment stood at 125.8 (1953 = 100).

Unemployment in the same countries remained at low levels compared with pre-war years; the lowest levels for the present decade were generally recorded around 1956 or 1957. During the 1957-58 recession, unemployment rose sharply in the United States of America and Canada, but its incidence in the other industrial countries was relatively limited. By mid-1960, unemployment had receded once more, although in a number of countries levels were still higher than the pre-recession lows. In particular, in the United States and Canada, in March 1960, 6.1 per cent and 9.8 per cent, respectively, of the civilian labour force were unemployed, as against rates well below 5 per cent for the average of 1956, and in both countries there was uneasiness over the likelihood of further increases in unemployment. Italy, which for many years has had by far the largest number of unemployed workers in Europe, showed an encouraging drop in unemployment from 1,937,500 in 1956 to 1,689,000 in 1959.

Among the countries of eastern Europe, the USSR, Bulgaria and Yugoslavia recorded rapid and uninterrupted growth in employment over the past decade; in the USSR, the general index of employment (1953 = 100) reached 125.1 in 1958, in Bulgaria it reached 130.3 in the same year (Socialist sector only), and in Yugoslavia it reached 151.8 in 1959. Czechoslovakia and Poland show more moderate increases, while employment in Eastern Germany, Hungary and Romania did not gain significantly.

In the economically less developed countries trends have been quite different. The cyclical fluctuations in the economies of the industrial countries have more of an impact on the incomes of less developed countries than on their employment levels ; trends in employment in the less developed countries are influenced rather by changes in the economic structure and in the rate of development. During the past decade, new job openings resulting from economic development have in wide areas lagged behind the supply of fresh entrants to the labour force resulting from population growth, so that the conditions of chronic unemployment and under-employment have grown worse. Continuing migration to the cities has also meant that visible unemployment is replacing part of the concealed rural unemployment. At the same time, critical shortages of key technical and sometimes of administrative personnel, as well as of skilled labour in general, persist. In many countries, programmes designed to secure a more effective utilization of the under-employed labour resources have failed to achieve significant progress.

National statistics that show an upward trend in unemployment in many of these countries in recent years reveal only part of the picture, since they are usually limited to certain classes of urban wage-earners. In Chile, for example, nationally reported unemployment in 1959 amounted to 9,000; but a sample survey, covering zones with more than a third of the national population and most of the national industry, concluded that real unemployment in these zones in June 1959 amounted to 70,000.[37]

Real Wages. Present data permit the detection of trends in incomes for wage-earners in manufacturing only, and for twenty-six countries only; they permit comparisons over time, but not between the levels of real wages in the different countries. In all twenty-six countries, real wages increased during the period 1954-58; the median annual rate of increase was approximately 2.3 per cent, or about the same as during the period 1946-53.

[36] For the detailed statistics on which this summary of trends is based, see the ILO *Yearbook of Labour Statistics* and the United Nations *Statistical Yearbook*. Background material on the subjects discussed here may be found in chapter VI of the 1957 *Report on the World Social Situation*, op. cit., and chapter V of the 1959 *International Survey of Programmes of Social Development* (United Nations publication, Sales No.59.IV.2). This section is based on data available in June 1960.

[37] *Ocupación y Desocupación, Gran Santiago, Valparaiso-Viña del Mar, Zona de Concepción, Valdivia-Los Lagos*, junio de 1959. Santiago, Instituto de Economía, Universidad de Chile, 1959.

Percentage increase	*Real wage trends in manufacturing industry in twenty-six countries (1954-1958)*
Less than 5	Finland, Egypt, India, Mexico, Philippines
5 but less than 10 ..	Australia, Denmark, Peru, Brazil, Ireland, Canada, United States, Ceylon.
10 but less than 15 .	Switzerland, Argentina, Belgium, United Kingdom, Austria, Italy, Norway, Sweden, Netherlands, France.
15 but less than 20 .	Israel, Japan.
20 but less than 25 .	Germany (Federal Republic).

The real wages of workers in the other branches of economic activity are, in general, advancing less rapidly than in manufacturing industry. The above data relate only to cash earnings and do not take account of fringe benefits, however, which in recent years have been liberalized in many countries for non-industrial as well as for industrial workers; so that the statistics may be considered broadly indicative of the improvement in the levels of living of workers in the countries listed.

For the less developed countries in general, the scanty available evidence points to extremely limited gains, if any, in real wages during the period under review.

Information on real wages for 1959 is available for only ten countries, most of them belonging to the predominantly industrial group: Austria, Belgium, Canada, Finland, France, Germany (Federal Republic), Japan, Philippines, United Kingdom and United States. The majority of these countries reported gains for the year of 3 per cent or over.

In the eastern European countries, cumulative gains in real wages from 1951 to 1958 ranging from about 14 per cent in Czechoslovakia to more than 40 per cent in Poland have been reported. These gains were frequently achieved by a combination of reductions in state-controlled prices and increases in money wages. In 1959 real wages in these countries increased by 4 to 5 per cent.

Consumer prices. The period since 1954 has been characterized in most countries by moderate increases in consumer prices, as the following table, based on official price indices, shows:

TRENDS IN CONSUMER PRICES 1955-1959

	1955-56	*1956-57*	*1957-58*	*1958-59*
Total number of countries to which data relate	95	95	95	72
Median annual increase ..	3.3	3.7	2.7	1.4
Countries with annual increase or decrease:				
10 per cent and more	15	12	14	5
5-10 per cent	19	20	14	7
0-5 per cent	49	56	53	46
Decrease	12	7	14	14

Trends in some of these countries diverged sharply from the general world pattern of moderate increases. The sharpest price increases are found in South America; in four countries of the region (Argentina, Bolivia, Brazil and Chile) prices have shot up from 200 to 400 per cent in the past five years, while in two others (Paraguay and Uruguay) they have nearly doubled. The continuing inflationary trends in these countries have led to political unrest and to difficult choices in their development policies. Among the countries for which data are available the only two outside South America in which prices have more than doubled in the past five years are two in Asia: Indonesia and the Republic of Korea, although prices nearly doubled in Turkey.

Hours of work. The trend noted in previous reports toward gradual reduction of normal weekly hours of work, either through legislation or through collective agreements, has continued during the period under review, particularly in the European countries. Since 1954, normal working hours have been reduced for the economy as a whole or for important sectors thereof in Austria, Belgium, Bulgaria, Czechoslovakia, Denmark, Federal Republic of Germany, Italy, Luxembourg, Norway, Sweden, Switzerland and the USSR. The norm has been brought down generally from forty-eight hours a week to standards of forty-one to forty-six hours. In other countries, such as the United Kingdom, Canada and the United States, standard working weeks of, respectively, forty-four, forty and forty hours were already widespread. In the United Kingdom, notable progress was made toward a reduction of the standard week below forty-four hours, mostly to forty-two hours, and in Canada and the United States a further extension of the forty-hour week was noted.

These reductions in the normal working week were accomplished without a fall in effective weekly pay rates, and have generally entailed a rearrangement of the weekly working schedule leading to a working week of five to five and one-half days.

Elsewhere, several countries were added to the majority that had already enacted legislation setting up the norm of a forty-eight-hour week. These included Haiti, Iran, Libya, Somalia and the United Arab Republic.

The trend toward reduction in normal hours of work is not reflected in the statistics on hours actually worked by wage-earners in manufacturing during the period 1954-1959 in the fourteen mainly industrial countries for which such statistics are available. Under favourable business conditions employers have generally found it worth while to adhere to longer than normal hours despite the financial brakes of overtime premiums. Thus, the short-term effect of a reduction in the normal hours of work would appear to be similar to that of a direct increase in money wages. In the long run, however, actual hours worked will probably follow the trend in normal hours.

Annual vacations with pay. The trend in the industrialized countries toward establisment by legislation of the right to a paid vacation has also continued. The number of countries with legislation concerning vacations now exceeds seventy. A vacation of two weeks for one year of service has become the most common standard, but twelve countries provide for a longer vacation period for all workers, and there is a more widespread trend toward a lengthening of the duration with years of service.

Social security

The gradual broadening of social security benefits and population coverage, described in chapter VII of the 1959 *International Survey of Programmes of Social Development*, has continued without major changes during the brief period under review. An almost universal problem has been the constant review of social security contributions and benefit rates to keep in line with the rising levels of living costs and wages.

The results of a special inquiry on the costs of social security undertaken periodically by the ILO indicate the net effects of such factors as the extension of coverage and the liberalization of benefits up to 1957. The following table, based on the results of this ILO inquiry, is intended primarily to reflect trends in individual countries; in view of the lack of homogeneity of social security statistics, any inter-country comparisons should be made with caution.

Trends in social security benefit expenditure
(1949-1957)

	Expenditure as percentage of national income			*Expenditure per capita at constant prices 1955 = 100*	
	1949	*1955*	*1957*	*1949*	*1957*
Australia	7.4	8.5	8.8	82	104
Austria	13.5	16.0	16.5	62	117
Belgium	14.0	14.5	14.8	77	107
Canada	7.0	9.1	8.5	66	98
Ceylon	2.7	3.1	4.1	82	125
Chile	6.6	8.0	8.5	83	106
China (Taiwan)	—	0.8	0.8	20	111
Czechoslovakia	—	—	—	71	129
Denmark	8.9	11.0	11.6	73	106
El Savador	—	—	—	—	110
Finland	8.9	9.4	11.6	60	114
France	14.0	17.0	17.9	62	120
Federal Republic of Germany	17.6	17.6	20.0	52	127
Guatemala	1.6	2.6	2.9	59	131
Iceland	7.0	7.1	7.6	87	110
India	—	1.1	1.0	—	96
Indonesia	—	—	—	—	31
Ireland	7.1	9.6	10.8	67	110
Israel	4.8	5.5	6.6	48	137
Italy	9.5	13.0	14.2	53	117
Japan	3.8	6.0	5.3	47	106
Luxembourg	13.5	16.6	16.5	59	107
Federation of Malaya	—	—	—	—	121
Netherlands	8.9	9.5	11.4	75	129
New Zealand	14.4	12.4	12.8	98	103
Norway	6.7	9.1	9.9	70	120
Panama	—	6.8	6.6	—	102
Poland	—	7.0	7.7	—	135
Portugal	4.6	5.6	5.7	64	105
Sweden	9.9	11.8	12.5	70	112
Switzerland	5.9	7.3	8.2	68	119
Tunisia	—	5.2	5.2	73	96
Turkey	1.8	1.2	1.2	91	105
Union of South Africa	3.8	4.4	4.4	70	105
USSR	—	—	—	—	149
United Kingdom	11.2	11.4	11.4	91	105
Ukrainian SSR	—	—	—	—	194
United States of America	4.9	5.3	5.7	74	111
Republic of Viet-Nam	—	1.0	1.0	—	108
Yugoslavia	12.7	9.9	9.5	96	112

Note. In several cases the data relate to the nearest year after 1949 for which the relevant statistics are available. In a few cases, for the other years shown, the data refer also to the nearest neighbouring year for which the statistics are available. In some cases the data refer to the financial year beginning or ending in the calendar year indicated. For details, especially as regards the social security schemes included here, and the other economic variables used, see ILO, *The Cost of Social Security*, Geneva, 1958 and 1961.

The wide range over which the figures of social security benefit expenditures (expressed as percentages of national incomes) vary reflects the differences in stages of social security development, in institutional arrangements, and in the scope of the schemes included in the statistics. The data show a general trend toward moderate expansion of social security, although a few countries, such as New Zealand and the United Kingdom, with firmly established comprehensive schemes at the beginning of the period, display relative stability. The indices of per capita benefit expenditure at constant prices reveal a sharper upward trend, indicating that social security benefits have kept pace with the rapid and sustained growth of real income per capita during the last decade in most of the countries included in the table.

National income and personal consumption [38]

For some years the "widening gap" between the economically developed (or industrialized) and the less developed (or primary-producing) countries has been a constantly recurring theme in international discussions of economic and social questions. As the 1957 *Report on the World Social Situation* pointed out, a widening gap is not necessarily visible in all aspects of human welfare, but it is generally agreed that, in regard to per capita production of goods and services, such a trend, while not pronounced, has been present through the past three decades. At the international level, this trend resembles the increasing imbalance between agricultural and non-agricultural incomes and production within individual countries, discussed in a later section of this chapter. Demand for agricultural and other primary products has increased less rapidly than demand for manufactured goods and services, and this has placed both the countries and the families that depend for their livelihood on the sale of such goods at an increasing disadvantage.

The use of national income figures for inter-country comparisons is beset with many problems, and their meaning in relation to the social situation is far from clear. Within the limitations of the present chapter only a general statement on the broadest trends can be made. The coverage of the published indices, and the circumstances behind the rates of growth of different countries, differ so widely that use of the figures for comparative purposes without a detailed study of each country might be misleading.[39] To take but one example, goods and services produced within the family for family consumption are not generally included in national income estimates, with the result that countries with a large subsistence sector have their real income seriously underestimated; but at the same time, since this sector is the most stagnant, the omission of such goods and services from the computations may give these countries an artificially high rate of growth, since addition of a few industries unduly boosts the rate.

In Europe, per capita national incomes at constant prices rose generally and, in most countries, steadily from 1953 to 1958, faltered slightly in that year and resumed their rise in 1959. Rates of increase appear to have been, in general, higher in countries of eastern, central and southern Europe than in the countries of western Europe, although the latter maintained their lead in absolute levels of income. In Canada and the United States, 1958 was a year of more pronounced recession; 1959 saw a new advance, but the net percentage gain in per capita income over the period since 1953 has been small.[40]

In the rest of the world a few countries apparently made remarkable gains; these included China (mainland), Israel, Japan, Mexico and Venezuela. In the less developed regions in general, however, incomes increased somewhat more rapidly than population up to 1957 or 1958, then dropped or stagnated under the impact of falling prices of exports, then made a partial recovery in 1959 and 1960, often owing to increased volume of exports and increased production for domestic use rather than recovery of prices of export products. During the entire period many of the less developed countries have been plagued by excessive year-to-year fluctuations in income, deriving from the impact of bad weather on their crops together with shifting export prices.

The largest countries of South and East Asia (excluding China (mainland) and Japan) have been troubled not only by violent short-term fluctuations in export earnings but also by a longer-term decline in their share of the export market for their traditional export products. A major reason in some of these countries has been the need to divert agricultural production from export to feeding the expanding populations: "Productive capacity has not grown rapidly enough to fulfil home demand and leave a surplus for export."[41] Meanwhile, foreign exchange needs for imports have risen steadily, not only because of the import requirements of development programmes, but also because the region now must import food.

In the Middle East and Africa trends have been divergent, and prices of export products, with the exception of cotton, have not been uniformly adverse. Two countries in which per capita income trends have been exceptionally adverse are Morocco and Tunisia, in both of which per capita incomes are probably lower now than in 1953; the reasons are a combination of bad harvests and the circumstances of transition to indepen-

[38] For a more detailed discussion of these questions see the United Nations annual World Economic Surveys, the Yearbooks of National Accounts Statistics and regional surveys of economic development and conditions in Asia and the Far East, Europe, Latin America, Africa, and the Middle East.

[39] For recent statistics on trends see table 167 in the 1959 *Statistical Yearbook*, op. cit. and also the 1959 *Yearbook of National Accounts Statistics* (Sales No.: 60.XVII. 3).

[40] Since the previous levels of income in these countries were much higher than elsewhere, however, the relatively small annual percentage gains have meant appreciable gains in absolute terms. In the United States disposable personal income per head at 1959 prices rose from $1,729 in 1953 to $1,891 in 1959, or by $162. (*Economic Report of the President*, op. cit., table D-14).

[41] *Economic Survey of Asia and the Far East, 1959* (United Nations publication, Sales No.: 60.II.F.1), p. 67.

dence, with a loss of many European technicians and a drying up of investment funds from abroad.[42] For Africa South of the Sahara there are only scattered data on national income levels, but it is clear that falling prices of many of the region's major exports have since 1957 countered a previously rising trend, and that in some countries events accompanying independence are having adverse effects.

In Latin America, per capita production and income up to 1955 were growing much more rapidly than population. Since then, reverses deriving from falling export prices have affected most countries, to varying degrees and in differing years. According to ECLA estimates, the per capita gross income grew by 2.2 per cent in 1955 over the previous year, 1.4 in 1956, 4.5 in 1957, 1.0 in 1958 and actually fell by 1.3 in 1959.

* * *

It was to be expected that the rising per capita income levels found in most of Europe during the period under review would be accompanied by rising levels of private consumption, and statistics on such consumption, which are more readily available for Europe than for most other parts of the world, indicate that this has occurred.[43] Since much of the increase in national income was channelled into new capital formation, the share of private consumption in national income did not increase in Europe as a whole — it rose in some countries and fell in others — but there was a general rise in absolute levels of consumption. Europeans, particularly those of the more highly developed and urbanized countries, "purchased" more goods and services with which to occupy the increased leisure time that has resulted from the long-term trend to a shorter working week and longer paid vacations.

Expenditure on food increased at about the same rate as total consumption expenditure, in apparent contradiction to the theory that the share of expenditure on food tends to decline as total expenditure rises. In fact, the increase in outside employment opportunities for women together with their desire to eliminate the more onerous aspects of food preparation from the home kitchen brought about an increasing demand for canned, frozen, pre-cooked or otherwise processed foods. The price of such foods includes a service factor, representing the value of packaging and processing. The growing popularity of restaurant meals was also a contributing factor, since the price of foods consumed in restaurants includes the cost of service. In other words, food's share in total consumers' expenditure now includes payment for some of the consumers' (and particularly the female consumers') leisure resulting from easier and less time-consuming ways of preparing and serving foods.

The share of expenditure going to clothing and also to alcoholic beverages and tobacco declined in most European countries; the share going to shelter showed no consistent trend.

Meanwhile, consumers' durable goods took an increasing share of expenditure in every European country for which data are available, except for two Mediterranean States, Greece and Italy. In 1957, expenditure on durables in western Europe at constant prices rose 9 per cent compared with 4 per cent for total consumption; in 1958, 6 per cent compared with 2 per cent; and in 1959, 9 per cent compared with 3 per cent.[44] Increases in purchases of durable goods that are relatively inexpensive and that have been on the market for some years — for example, radios, motor cycles, electric irons and vacuum cleaners — were modest, but an explosive expansion of purchases was concentrated on a limited number of products that are either recent arrivals in the market (such as television receivers and motor scooters) or that have only recently come within the financial reach of the mass of consumers (such as automobiles and refrigerators).

The two products with the most spectacular growth in sales — television receivers and automobiles — both represent methods of utilizing leisure time. While the rise in numbers of television receivers in use has been more rapid than that of automobiles, since the former were relatively new products in most of Europe in 1954-55, the rise in the number of automobiles is probably even more significant as an indication of change in the ways of life of the mass of people, particularly in the countries of northern and western Europe, where until recently the prices of automobiles limited their purchase to a well-to-do minority.

The following table shows the cumulative result of several years' spending on automobiles:

	Passenger cars in use (thousands) [a]	
	1954	*1958*
Austria	92.0	286.1
Belgium	439.6	641.2
Denmark	193.3	309.5
Finland	70.8	139.2
France	2,677.0	4,512.0
Germany (Federal Republic)	1,535.0	3,201.0
Greece	16.6	36.4
Iceland	7.2	12.9
Ireland	122.8	148.2
Italy	744.3	1,421.3
Luxembourg	18.5	31.1
Netherlands	219.4	420.0
Norway	107.7	172.3
Poland	36.1	83.9
Portugal	87.1	116.0 (1957)
Spain	117.5	166.6 (1957)
Sweden	535.9	972.0
Switzerland	237.5	386.4
United Kingdom	3,127.8	4,565.6
TOTALS	10,490.0	17,870.0

[a] Adapted from table 143 in the 1959 *Statistical Yearbook*, op. cit.

[42] In Algeria, on the other hand, the index of gross national product per capita at constant prices rose from 100 in 1953 to 130 in 1957. This, however, only illustrates one of the shortcomings of the indicator, if used to measure welfare; the increase derived largely from the growth of services, transportation, etc. necessitated by the presence of large military forces.

[43] For a detailed analysis of this trend, including differences between western Europe and eastern Europe and USSR, see *Economic Survey of Europe, 1958*, op. cit., chap. IV and V.

[44] See tables 4-7 in *World Economic Survey, 1959*, United Nations publication, Sales No.: 60.II.C.1.

In all European countries for which data are available, the share of expenditures which consumers devoted to transport and communications increased. Part of this increase was caused by the cost of operating the growing number of automobiles in use; part by the increasing volume of tourist travel by rail or air. Increases in domestic tourist travel would be hard to estimate, but figures on tourist travel across international boundaries, which usually involves higher expenditure than domestic travel, show significant increases between 1954 and 1957.[45]

The three categories of expenditures which since 1954 have either substantially increased (consumers' durable goods and travel) or failed to decrease as expected because of structural changes (food) can thus be related to new ways of using leisure time and reducing domestic drudgery; these amount now to about one-half of total consumer spending in Europe. It may even be said that this recent shift in consumption patterns and in related uses of leisure is the major social trend visible in Europe during the period under review. The logical social consequences of certain (not necessarily very recent) technical and economic innovations — previously inhibited by more than three decades of depression, war and post-war reconstruction — happened to come to the fore with a strong cumulative effect during this period. The trend has responded to some insistent popular demands, but has not met with universal approval—in part because of views concerning the need for higher public investment, in part because of the passivity of some of the new uses of leisure, in part because of the undesirable by-products (especially traffic congestion, accidents and air pollution) of mass use of automobiles in a densely populated and highly urbanized continent such as Europe.[46]

In eastern Europe and the USSR, consumer expenditures have also risen considerably in recent years, and there has been a shift toward consumers' durable goods, although these still take a much less important share of consumer expenditures than in western Europe. In these countries an enormous backlog of unsatisfied demand for all kinds of consumers' goods existed at the beginning of the period; by now this has been met to the extent that increasing selectivity on the part of the consumers is reported. In the USSR in 1959, in spite of rapid increases in production of such durables as television sets, washing machines and refrigerators, shortages were still reported, while supplies of clothing, radios and some other consumers' goods exceeded effective demand.[47]

In Canada and the United States, trends were somewhat different. In both countries consumer expenditures were much higher than the average for western Europe throughout the period under review, but increased more slowly in percentage terms in every year since 1954 except 1959. The share of durable goods in these expenditures was also higher than in Europe, but slumped in 1958 with the decline in automobile purchases, and in 1959 did not rise enough to regain the 1955 percentage of consumer spending. In the United States, durable goods accounted for 15.4 per cent of consumer spending in 1955; 12.8 per cent in 1958; and 13.8 per cent in 1959. The percentage spent on foods declined very slightly, concealing the same trend as in Europe toward a higher component of packaging and servicing in the food expenditure. The decline in the share of durable goods, such as automobiles, was not enough to halt the trend toward wider ownership of these goods, which was backed up by high spending on them over the past decade. In the United States it was reported that the percentage of families owning one or more automobiles rose from 71 in 1955 to 74 in 1959; the percentage owning two or more from 11 to 15; while the percentage of houses wired for electricity that possessed television sets rose from 76.1 to 89.9, and the percentage with refrigerators from 94.1 to 98.0.[48]

In the economically under-developed parts of the world, up-to-date information on consumer expenditures is available for only a few unrepresentative countries, and few clear-cut short-term trends can be detected. Food takes a much larger share of consumer expenditure in these countries than in Europe and Northern America, and the scanty information on food consumption has been discussed above. Private consumption of products other than foods, and to some extent even of foods, in these regions depends largely on imports and the capacity to import consumer goods depends both on the proceeds of exports and on competing demands for foreign exchange. The most widespread trend has been toward the limitation of non-essential imports, so as to compensate for weaknesses in the export market, adverse balance of payments, and rising demands for capital goods. Such restrictions, however, vary from country to country and from year to year, and the impact on the consumer is hard to measure.[49] In general, the restrictions bear most severely on the more expensive durable goods that are consumed by upper-income minorities; passenger automobiles, in particular, are generally affected by import quotas and high duties, and have remained few in number except in several rapidly industrializing countries, such as Brazil and Mexico; in the United Arab Republic (both Egyptian and Syrian regions) the number in use has declined since 1954, as a result of import restrictions and the aftermath of the Suez crisis.[50] The only expensive goods that have attained rising sales during the period under review are television receivers and these are naturally limited to some urban zones within range of broadcasting stations.

[45] See table 143 in the 1958 *Statistical Yearbook*; more recent data have not been compiled internationally, but there is no reason to doubt that the increase in international tourist travel has continued.

[46] Road building has lagged behind the expansion in numbers of vehicles to such an extent that the number of kilometres per passenger car in such countries as Belgium, Sweden and the United Kingdom is only half that of pre-war. The number of persons killed in road accidents has risen to about 60,000 a year in Europe; the number of accidents involving death or injury per kilometre travelled by road vehicles is triple that in the United States.

[47] See *Economic Survey of Europe, 1959* (United Nations publication, Sales No.: 60.II.E.1), pp. 27-29, and *World Economic Survey 1959*, op. cit., pp. 233-240.

[48] *Economic Report of the President*, op. cit.

[49] See *World Economic Survey, 1959*, op. cit., pp. 204-212.

[50] *Statistical Yearbook 1959*, op. cit., table 143.

Various cheaper durable goods, particularly radios, bicycles and sewing machines, are within the reach of a much wider circle of consumers and there is no doubt that their use is increasing generally, in rural as well as in urban areas. In such countries as Ghana, Morocco, Nigeria, the United Arab Republic (Egyptian region) and Ceylon, the number of radio receivers more than doubled between 1953 and 1958 and all countries for which data are available show large increases.[51] The purchase of radios has been stimulated by widening interest in politics, and is encouraged by many Governments as an aid to their efforts to arouse popular support for their policies. These products are less affected by import restrictions than are the more expensive durable goods, since in the larger countries they are now produced locally. It is reported from parts of Africa, Asia and Latin America that peasant savings are now increasingly diverted to such goods from the traditional hoarding of coins and conspicuous consumption at weddings or other festivals. In the poorer countries, however, even with recent increases, consumption of durable goods is still very limited. In India, according to one study, the number of bicycles in use increased from 1.67 per 1,000 people in 1955 to 2.38 in 1959, so that a little more than one family in a hundred owned a bicycle.[52] The number of radios in the same country increased from about 2.5 per 1,000 in 1955 to about 4 per 1,000 in 1958.[53]

Rural-urban relationships

The process of economic development implies a continuing shift of workers from agricultural to non-agricultural occupations, coupled with a rise in the productivity of the workers left on the land. The nearly universal disparity between agricultural and non-agricultural incomes serves to promote such a movement of workers from the agricultural sector.[54] Ideally, productivity in agriculture would rise at a rate meeting the cities' growing demands for food as well as the demands of export markets, while permitting the release of agricultural workers at a rate meeting the rising demand for labour in industry and services. In practice, of course, the transition does not proceed so smoothly, and in many countries today something quite different is happening: productivity is hardly increasing at all, while masses of rural workers come to the cities looking for jobs that either do not exist or from which they are barred by illiteracy and lack of skills.[55]

During the period under review (allowing for the qualifications and disclaimers that must be applied to all world-wide generalizations), maladjustments between agriculture and the rest of the economy have grown more pronounced, both in some of the most highly developed countries and in some of the poorest.

At the one extreme, a technological revolution in agriculture (management innovations, mechanization, higher-yielding plant and animal varieties, more extensive application of fertilizers), combined with an inelastic demand for most farm products, has meant overproduction, with prices of farm products precariously supported through expensive government aid. At the other extreme, the failure to carry through a revolution in technology and land tenure, combined with increased demand on the part of rapidly growing urban populations, has meant chronic food shortages, inflationary pressures, and diversion of foreign exchange from developmental needs to food imports. Between the extremes are many countries with differing problems and trends, but only a few that have maintained a satisfactory balance. Price trends have been generally unfavourable to farmers and the gap between urban and rural incomes has widened, as has the gap between agricultural and industrial nations. Many of the economically underdeveloped countries that depend on specialized agricultural exports have faced particular difficulties in view of the steady deterioration in the terms of trade of these products.

Terms of trade of agricultural and forest products

(Indices of average export unit values, at current prices, deflated by index of average unit values of manufactured goods) [a]

(Average 1952/1953 = 100)

1954	103
1955	97
1956	91
1957	89
1958	83
1959 (preliminary)	81

[a] *The State of Food and Agriculture, 1960*, op. cit., p. 47.

This deterioration has been a major factor affecting the welfare of the population of the less developed countries in the years under review, retarding their rates of economic growth in relation to those of the countries selling industrial products.

The centrally planned countries have generally narrowed the gap between agricultural and non-agricultural incomes to some extent during the same years, providing stronger incentives for increased agricultural production, but have not yet succeeded in making productivity in

[51] *Ibid.*, table 188.

[52] *Eastern Economist*, New Delhi, Budget Number, 4 March 1960.

[53] These ratios are based on the numbers of licensed radio receivers, and presumably are somewhat below the actual number of sets in use.

[54] FAO calculations indicate that, in the majority of countries, income per capita originating in agriculture ranges between 40 and 60 per cent of income per capita originating outside agriculture, and that, in general, disparities to the disadvantage of agriculture are greatest in the economically less developed countries, but with many exceptions: the disparity between farm and non-farm incomes in the United States is particularly great, and Ceylon is one of the very few countries without a disparity. The statistics, however, probably exaggerate the disparity in both groups of countries. In the economically developed countries, it is easier for farmers to understate their net incomes than for other groups to do so; and, in the less developed countries, subsistence income and services performed within the family are not given an adequate weight in income calculations. See *The State of Food and Agriculture, 1959*, op. cit., pp. 95-99 and annex table 14.

[55] A recent International Labour Office report discusses in detail the characteristics and implications of the movement of labour out of agriculture in different countries and regions: *Why Labour Leaves the Land*, Geneva, 1960.

agriculture increase at the rate planned, partly because of unfavourable climatic conditions in the most recent period.

The United States is the most important and the most clear-cut example of the first type of problem mentioned above, as the following statistics show: [56]

	1947-49	*1955*	*1959*
Agricultural labour force (in thousands)	8,078	6,718	5,836
As a percentage of total employed labour force	16.0	11.9	9.8
Index of productivity in agriculture per man-hour of farm work	100	149	189
Index of total output of farm products	100	113	125
Wholesale price index for farm products	100.0	89.6	89.1
Wholesale price index for all other commodities	100.0	117.0	128.2
Total net income from all sources per person of farm population in 1947-49 prices	$851	$798	$803
Civilian food consumption per capita (pounds):			
Red meat and poultry	170		194
Fluid milk and cream	359		348
Vegetables	227		221
Cereal products	185		160
Potatoes and sweet potatoes	127		110

The most remarkable increases in farm productivity per man-hour have related to cereals and root crops, consumption of which now has a negative " income elasticity "; that is, as incomes rise people buy less bread and potatoes. Government price supports and related programmes are believed to have kept net farm incomes one-third higher than they would otherwise have been,[57] but have not prevented them from declining while non-farm incomes have risen. Acreage restriction and other measures intended to curb production have not prevented the continued accumulation of surpluses. At present there is considerable disagreement as to the direction future policy should take, and a fresh approach is expected from the administration taking office at the beginning of 1961.

The President's Commission on National Goals recently pointed out that 50 per cent of the farmers produce only 10 per cent of farm output and urged that about 1,500,000 farm operators be helped to find better-paying non-farm jobs.[58] Farming, or at least rural living, however, is widely considered a desirable " way of life ", to be supported even at some cost to the rest of the community. There is widespread reluctance, therefore, to reduce the agricultural sector to the level indicated by economic efficiency, and opposition to measures that would force large numbers of unwilling farmers off the land and into the cities. A partial solution may be appearing through the decentralization of industry and the mobility given to the American worker by the automobile. Small farmers can increasingly find jobs in towns within a radius of several miles without leaving their homes, and there is a movement of workers out of the towns to build homes in rural areas that are within commuting distance of a factory.[59]

In Canada, the agricultural share of the labour force has fallen even more sharply than in the United States: from a 1947-49 average of 1,157,000 to 873,000 in 1955 and 739,000 in 1958, or from 23.4 per cent of the labour force to 16.3 and 12.9 per cent. Because the decline in agricultural population has matched the rise in agricultural productivity, income trends have been less adverse to farmers than in the United States. The Canadian Department of Labour points out that the number of persons working on farms year-round has shown a disproportionate decline, since mechanization has enabled an increasing number of farmers to dispense with permanent paid help, using only temporary workers during seeding and harvesting.[60]

Australia and New Zealand, with their large-scale pastoral-agricultural enterprises, are among the very few countries in which farm incomes appear to be somewhat higher than non-farm incomes. Here, while annual fluctuations in farm production and in export markets have created difficulties for the economies, there is no serious problem of rural backwardness or excess population on the land. The need for additional urban workers is being

[56] *Economic Report of the President*, op. cit.

[57] *The State of Food and Agriculture, 1959*, op. cit., p. 121.

[58] Report of the President's Commission on National Goals, released 28 November 1960.

[59] In the United States in 1955, farm-operator families received one-third of their total incomes from non-farm sources, while wage workers who were mainly employed in agriculture received 20 per cent of their wage-incomes from work outside the farms. (*The State of Food and Agriculture, 1959*, op. cit., p. 99.)

[60] Memorandum from the Economics and Research Branch, Department of Labour, accompanying communication from the Government of Canada, dated 8 June 1960.

met mainly through immigration rather than internal migration.

In most countries of Western Europe, the farmers are supplying a market in which their position is protected by some combination of price supports, subsidies and import duties. These measures have kept their incomes at a level between 60 per cent and 80 per cent of non-farm incomes, or much closer to parity than the world average. The two main exporters of farm products in this region, Denmark and the Netherlands, are suppliers of dairy products and meats which, among foods, enjoy a relatively high income elasticity of demand, and farm incomes have been maintained at satisfactory levels. Measures for the support of farmers in some of the European countries, however, have led to conflicts between their interests and those of consumers and taxpayers, as in the United States. In France, in particular, price supports have not prevented farm expenses from rising faster than incomes over a number of years, so that discontent among the farmers has become a serious political problem.

In Europe since the Second World War there has been no difficulty in absorbing surplus agricultural labour into other activities, except in the Mediterranean countries where there is surplus labour in the cities as well as in the countryside, and an out-migration of workers (to France and the Federal Republic of Germany). The Federal Republic of Germany, the Netherlands and Switzerland, among other countries, are now turning to policies of rationalization and consolidation of farms that should take some of the remaining low-income rural population out of agriculture. Here again, however, considerations of economic efficiency conflict to some extent with the wishes of the farmers and with the valuation placed on the rural way of life. Most European countries have some rural areas that are not particularly well adapted to agriculture, lack alternative means of livelihood, and show income levels well below the national average. The Governments are unwilling to see these areas lag farther behind, or, alternatively, lose the remainder of their populations, even if the latter can be absorbed into more productive urban employment.

In Europe as well as in North America, the least efficient small cultivators, who are concentrated mainly in these backward areas, are slower to move into non-agricultural occupations than are relatively well-off rural groups. They are not only at a disadvantage in their lack of qualifications for such occupations; they are also likely to have less initiative and adaptability than other groups; many of them accept deepening poverty rather than leave the land. The danger is that, if they are left to themselves, the gap in culture and level of living between them and the rest of the population will continue to widen and become ever harder for them to cross.[61]

* * *

In some under-developed countries, there have been important local gains in agricultural production through the bringing of new areas into cultivation and through the completion of irrigation projects. Production of export crops, mainly on large estates but sometimes, as in Ghana and Uganda, by small farmers, has as a rule been limited chiefly by the inelastic international market; several countries are currently burdened by surpluses of such crops as coffee and cotton.

The main problem of rural-urban relationships in under-developed countries, however, has almost everywhere remained intractable or become more serious. This is the failure to transform the mass of small cultivators and rural workers into efficient farmers or productive non-agricultural workers. Disparities between agricultural incomes and non-agricultural incomes in many of these countries are very wide, but the rate of urban economic development is not high enough to absorb the resulting flow of migrant labour, and most of the migrants are poorly adapted to the needs of the urban economy. The urban side of this problem was discussed in detail in the 1957 *Report on the World Social Situation*, and more recent information adds little to the broad picture there presented.

The rural population in most of these countries, however, remains several times as large as the urban. From the social point of view, the raising of the levels of living of these rural masses is an urgent task; and, from the economic point of view, development cannot proceed in a healthy fashion in other sectors of the economy unless the rural population becomes a more adequate source of food supplies, a source of better-qualified labour, and an expanding market for the products of the rest of the economy. This problem is present both in densely populated countries and in thinly populated countries; in countries where small landowners, tenants, and share-croppers predominate; and in countries of large estates worked by wage labour. It is present in important regions even within the few countries, such as Mexico, in which national agricultural production has increased at a highly satisfactory rate.

The Governments of some of these countries have sought to protect or stabilize the incomes of the producers of export crops, even at the cost of heavy purchases of surplus products, as in Brazil. These measures, however, have in general helped only the more prosperous farmers. As to domestically consumed foods, the Governments have been more concerned to protect the interests of urban consumers than to provide price incentives for the producers; many of them have even subsidized food imports through favourable exchange rates. " In some cases the emphasis on the consumer side has gone so far that it appears to have hampered the badly needed agricultural expansion and thus to have aggravated the inflationary pressures it was designed to combat." [62]

In major countries of Asia, the most prominent aspect of the problem is the excess of rural population in relation to cultivable land, with rural dietary levels so low

[61] See *Why Labour Leaves the Land*, op. cit., for a discussion of this problem and of some measures proposed to meet it.

[62] *The State of Food and Agriculture, 1959*, op. cit., p. 120.

that any increase in production is likely to be absorbed by the producers themselves, and with land-holdings often so small and so intensively cultivated that many methods of expanding production applicable elsewhere become irrelevant. In the same countries, the absorptive capacities of the urban economies are particularly weak in relation to the overwhelming numbers pressing to find employment in them.

In tropical Africa the major difficulties are the technical backwardness of most agriculture, the continued exodus of able-bodied males from the land, and, in many areas, unfavourable soil and climatic conditions that are becoming worse under the impact of slash-and-burn cultivation and over-grazing. It is generally agreed that the kind of recruitment of temporary unskilled labour associated with employment in European-type enterprises is today a hindrance both to the development of sound agricultural and industrial systems and to the emergence of stable modern societies in the countryside as well as the towns.

In Latin America and the Middle East, conditions vary widely in different zones, with some areas of rural overpopulation and some of inefficient shifting cultivation and pastoral ways of life. In these regions, however, problems of tenure are particularly prominent: systems of share-cropping and tenancy in which the landowner collects a high rent while contributing nothing to production; large and inefficiently cultivated estates occupying the fertile land, juxtaposed with tiny subsistence holdings on the barren hill-sides.

These problems have been well known and widely discussed for some years. There has been international agreement on the need for agrarian reform but limited national achievement. In practice, national development programmes have tended to concentrate on the non-agricultural sectors of the economy, in which measureable progress is easier to bring about and the interests opposed to reforms and progress less strongly entrenched. There is some evidence that, during the period under review, the attention of policy-makers is turning to the relation between rural problems and development in general.[63] In Chile, the stagnation of food production has been singled out as the key factor behind the country's chronic inflation and as a major obstacle to further development of the rest of the economy.[64] In Peru, since 1950, " the absence of dynamic agricultural expansion has been an obstacle to Peru's general development, has handicapped attempts to raise standards of living, and has also seriously limited the country's ability to finance future development.[65] Similar authoritative statements have been made in many other countries. The experience of the countries that have undertaken large-scale land reform and community development programmes, however, shows that the raising of the productivity of the rural masses is one of the most difficult and complicated tasks that a country can undertake.[66]

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[63] See chapter III, " Programming for agricultural development ", in *The State of Food and Agriculture, 1960*, op. cit.

[64] For example, in Nicholas Kaldor, " Problemas Económicas de Chile ", *El Trimestre Económico*, April-June 1959; and in David Felix, " Structural Imbalances, Social Conflict and Inflation: An Appraisal of Chile's Recent Anti-Inflationary Effort ", *Economic Development and Cultural Change*, Chicago, January 1960.

[65] FAO-IBRD, *The Agricultural Development of Peru, Part I, General Report*, (Washington), August 1959, pp. 1-2.

[66] For recent information on land reform programmes see *Economic Survey of Latin America, 1959* (United Nations publication, Sales No.: 60.II.G.1), chapter IV; *Economic Development in the Middle East 1957-58*, United Nations publication, Sales No.: 59.II.C.2, and *1958-59* (Sales No.: 60.II.C.2).

PART II

Chapter II

THE INTERRELATION OF SOCIAL AND ECONOMIC DEVELOPMENT AND THE PROBLEM OF " BALANCE "

Introduction

The social trends described in the preceding pages merge with economic trends. In fact, the separation between the " social " and the " economic " is often an artifact of academic analysis and government departmentalization. It may be convenient to make such a separation for the purpose of analysis or administration, but the different aspects must be put together again, and the situation must be viewed as a whole before any comprehensive conception of development — or comprehensive policy of development — can be achieved.

The question of the interrelation of economic and social factors of development has been brought into focus by certain changes in the role of the modern State. Since the late nineteenth century, but particularly in the last few decades, Governments have assumed increasing responsibility for the promotion of social welfare and simultaneously for the development of the national economy. This is evident in the remarkable expansion after the Second World War both of social programmes — often embodied in principle in new national constitutions [1] — and of economic development planning. This simultaneous preoccupation with social measures and with economic projects — and the inevitable competition for funds, and differing opinions regarding priorities — has raised difficult policy questions for government planners and budget makers.

The General Assembly of the United Nations, as well as the Economic and Social Council and its Social Commission, have adopted a number of resolutions in recent years emphasizing the importance of " balanced " and " integrated " social and economic development and urging that action in these two fields go " hand in hand ".[2] In academic and professional circles, also, the question of the relationship between economic and social factors in development has become a matter of growing interest — in fact, a matter of considerable controversy. No one will deny that, from a policy point of view, an appropriate relationship should be established between the economic and the social; the difficulty lies in defining what is " appropriate ".

At stake, in the last analysis, is the establishment of an over-all theory or model of growth, particularly for countries that are economically under-developed. It is, of course, inconceivable that the very same detailed recipe for growth would suit all countries, given their different levels of development, or even all countries at the same level of development with differing backgrounds. But recognition of this fact is the first step in the direction of an understanding of growth, not an invalidation of the inquiry.

As the following review will indicate, interest has shifted from an initial preoccupation with negative aspects of the relation between economic and social factors to a more positive concern with policy questions — from warnings and complaints to efforts at co-ordinated action. The expression, " balance and integration of economic and social development ", reflects this shift in emphasis.[3]

From a governmental point of view, the question of balanced social and economic development is to an important extent a question of the pattern of public expenditure. There is no over-all conception or theory of balanced development applicable to the expenditure policy of the economically underdeveloped countries at the present time; there are only fragments of a theory and " common sense ". One difficulty with common sense is that it rarely transcends the bounds of professional interests. As a result, the recommendations for development of a visiting mission or a local planning board will be often seen to reflect the composition of the mission or board; each representative of a professional field tends to consider his own field most important for develop-

[1] See *International Survey of Programmes of Social Development* (United Nations publication, Sales No.: 55.IV.8), pp. 3-4.

[2] See, for example, resolutions 627 (XXII), 663 H (XXIV) and 731 J (XXVIII) of the Economic and Social Council, and resolutions 1161 (XII), 1258 (XIII) and 1392 (XIV) of the General Assembly.

[3] See the opinion of a United Nations expert committee that, " Instead of treating social policy as a housemaid whose function is to tidy up human suffering and insecurity left in the wake of economic development, social objectives should be built in on an equal footing with economic objectives into comprehensive social and economic planning " in *Report on a Co-ordinated Policy regarding Family Levels of Living* (United Nations publication, Sales No.: 57.IV.7), p. 18.

ment, and consequently urges heavy investment in projects in that field. The lack of an over-all conception of balance in relation to public expenditure has been forcefully stated in the following passage:

> " . . . what is the appropriate level and distribution of public expenditure in under-developed countries? The question cries out for an answer, if not in rigid quantitative terms, at least in terms of some principles which may be used in judging government programmes. Through the world, Ministers and officials are busily engaged in working out five-year plans for public expenditure, and they look anxiously to economists and to others for guidance as to what is appropriate. Neither is there any lack of advice offered. But in none of the mass of published reports can one discover how the authors have decided what level or pattern of expenditure was appropriate. Judgements in this sphere of public finance boil down to little more than personal assertions." [4]

Countries of Africa, Asia and Latin America, the majority of which have development plans of one kind or another and are seeking to establish new patterns of welfare and growth, not only face harsh and difficult choices in the allocation of their limited domestic resources, but also must choose among alternative possibilities in the limited assistance available from abroad. To be effective, such assistance has to be based on an assessment of economic and social needs and capacities and on the application of some reasonable order of priorities.[5] The international organizations rendering assistance to less developed countries in their turn face questions of balance and integration in the forms of assistance that they provide.

Social consequences of industrialization [6]

In the late nineteenth century, economic theory was not preoccupied as it is today with the concept of economic development — although sociologists and anthropologists addressed themselves to questions of social evolution rather more than they do today. Leading social philosophies of the time tended to assume that the wealth of a region was a more or less static quantity; those who got more — by virtue of superior strength, cunning or fortune at birth — did so because others got less; the goal of social policy was to protect the weak and the poor against further exploitation, or to achieve a radical redistribution of wealth in the name of social justice. Industrialization was widely seen as a negative or retrogressive influence from a social welfare point of view. Deep concern arose over social ills that were observed in rapidly growing industrial and urban centres — unhealthy working conditions, starvation wages, child labour, disruption of family life, over-crowding, filth and sordidness in slums, delinquency and corruption of youth. Concern with these problems has continued into the twentieth century and is shared today by economically less developed countries that are seeking rapid industrialization.

It is no longer believed, however, that such social ills are a necessary consequence of industrialization.[7] Many of them simply represent evils of urban poverty and over-crowding that appear quite independently of industrial growth; they often result from a transfer, through migrants, of rural destitution to an urban setting, where it becomes more conspicuous. What is needed in these cases is not less industrialization but more industrialization.[8] Industrial growth — along with other forms of economic growth — is required to absorb the surplus labour, provide higher incomes, and create the financial resources for more effective social action. Redistribution of existing wealth, by itself, cannot solve the social problems of the poorer countries; the total amount of wealth must be increased through economic development. This modern conception of the central role of economic development in social progress has deeply affected the theory of social policy and social action.

Through the adoption of modern labour standards, various ills directly identified in the past with industrialization — for example, inhumane working conditions and child labour — can be, and to an important extent have been, outlawed from modern industry. For example child labour, a practice originally transferred to industry from agriculture (where in the family setting it was much less offensive), has now largely disappeared in the more developed countries. In less developed countries, it is mostly in the small workshops and sweatshops in back streets, rather than in the large modern industries, that these conditions will be found to prevail today. The workers who have entered modern industries, where contemporary labour standards are more apt to be applied, constitute an elite among the working class in the underdeveloped countries. Even the subjugation of the individual to the machine (the stationary machine in the factory, not the mobile machine on the farm), which has been the source of much complaint against industrialization, tends to diminish when a certain stage of automation is reached and the machine itself does the routine physical tasks.

Still another category of social problems, more intangible and perhaps more intractable, concerns the disrup-

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[4] Alison M. Martin and W. A. Lewis, " Patterns of Public Revenue and Expenditure ", *The Manchester School of Economic and Social Studies* (Manchester), September 1956, pp. 216-217.

[5] See Economic and Social Council resolution 496 (XVI).

[6] The social consequences of industrialization and the social obstacles were reviewed in the report entitled *Processes and Problems of Industrialization* (United Nations publication, Sales No.: 55.II.B.1) and considered in some aspects in part II, on urbanization, of the 1957 *Report on the World Social Situation* (United Nations publication, Sales No.: 57.IV.3). UNESCO has encouraged a considerable amount of research and publication on both these and related subjects, under its project on " the social implications of industrialization and technological change ". The present report, therefore, treats them but briefly. For a full discussion, the reader is referred to the forthcoming publication by UNESCO of the papers and proceedings of the North American Conference on the Social Implications of Industrialization and Technological Change.

[7] See *Report on the World Social Situation*, op. cit., part II, on urbanization, pp. 112-113.

[8] Provided, of course, it is not merely industrialization that competes with traditional handicrafts and village industries and does not expand fast enough to absorb those whose labour it displaces.

tion of community and family life, which often seems to accompany transition to an urban-industrial environment, especially when the cultural gap to be traversed is wide, as in Africa today. Old institutions, values, loyalties and systems of authority are lost, because they are too deeply identified with the past or are incongruous in an industrial society, but they may not be replaced for some time by new ones. Mere physical separation from kinsfolk and community of origin can deprive the individual of social identifications, and of material and moral support when these are most needed. " Anomie ", the feeling of being lost and rootless, family disintegration, lack of supervision of children, the formation of delinquent gangs of youth, and collapse of personal morals sometimes result — though by no means always. Such consequences of industrialization have been portrayed with foreboding since the nineteenth century. It is demonstrably false, from evidence available today, that a modern industrial society cannot have strong and stable family and community bonds, once the new society is established. But in the process of transition, of breakdown of old social forms and creation of new ones, there is a particularly dangerous phase when attitudes and behaviour may be without anchors, controlled more by passing winds of demagogy, faddism or mob spirit than by established values of home and community.

The difficulties of social transition are not limited to the urban-industrial environment. The introduction into the countryside of schools, paid labour and modern legal and administrative systems tends to break down the traditional authority and controls exercised by the extended family, kinship or tribal group and may have disruptive effects of considerable magnitude in the rural districts.[9] Conflicts between generations occur here as in the cities, when the status and influence of the older generation are diminished in the face of the superior education and the independent monetary income of the younger generation.

When workers acquire stable jobs with adequate pay and settle down permanently in a new environment with their families, many of the problems of transition tend to disappear. Unfortunately, it is precisely the workers caught between two cultures who are least likely to obtain stable jobs with adequate pay. It is these same persons also who are least likely to benefit from modern labour and welfare institutions and mechanisms, such as vocational training, employment service, social security, low-cost housing, etc.

Social cohesion is often maintained in these cases through the continuance and transformation of traditional institutions — for example, the conversion of ethnic or tribal affiliations in cities into welfare or labour associations. Sometimes the traditional religion plays a major role in maintaining social cohesion during the process of adaptation of the individual to the modern industrial society; at other times it is repudiated, along with much else from the past. Nationalism has become almost universally a source of new identification and group cohesion for populations in transition, replacing or dominating older loyalties to kinship, ethnic or other traditional groups. " In-group " feelings are converted into national attitudes, and passions of rivalry found among the customary societies are often projected onto the international scene.

Social " obstacles " to economic development

Once the importance of economic development as a means to social ends was recognized, attention turned to a different set of problems — the social obstacles to economic development. In part, they are the same problems differently conceived: if, for example, a traditional mode of life that is incongruous with a modern industrial economy can be disrupted by economic development, it can also, as long as it survives unchanged, act as a block to such development. Much has been written on the subject of social obstacles to economic development in the last few decades. They can be roughly classified under three main headings: population, institutional and individual factors.

(1) *Population factors.*[10] Since economic growth is ordinarily defined as growth in per capita national income, which in turn is defined as the ratio of production to population, it is obvious that trends in population can, mathematically speaking, play as large a role in economic growth as trends in production. In fact, some observers maintain that, for a number of countries, from a purely economic point of view, the most efficient investment to promote economic growth would be investment, not in economic production, but in reduction of birth rates.

The situation is complicated by the fact that production and population — the numerator and the denominator in the ratio that defines the level of economic development — are not independent variables; growth of production and growth of population interact upon each other in ways that are obscure and controversial. In some circumstances, population growth entails commensurate or even greater production growth (e.g., when resources and technology are adequate and labour in short supply). In other circumstances it does not; per capita income may be held back or even decline with rapid population increase, in an existing context of unemployment and under-employment, and at given inadequate levels of technology and resources. Increase in production, in turn, may stimulate population growth under certain circumstances; for example, in some of the most highly developed countries today, marriages and birth rates may rise for a time with expanding economic conditions (and drop with depressions), while in the very poorest countries there may be both a rise of birth rates

[9] At the same time, there is evidence that, under some circumstances, industries can be introduced into peasant societies without having drastic social, cultural and psychological consequences — they can have a socially integrative effect by virtue of the fact that the greater economic resources they provide may help resolve some of the family tensions that arise from poverty. (See Manning Nash, " Introducing Industry in Peasant Societies ", *Science* (Washington) Vol. 130, 27 November 1959, pp. 1456-1462.

[10] See *Determinants and Consequences of Population Growth*, United Nations publication, Sales No.: 53.XIII. 3.

and a drop of death rates when increased production immediately brings better nutrition and health. On the other hand, expansion of production, especially through industrialization, in populations that have reached a certain level of development, may be associated with declining birth rates and a slow-down of population growth, as has been the case in various countries of southern and eastern Europe in recent decades. Countries showing this demographic pattern, in which the death rate is relatively stabilized and the birth rate is dropping rapidly or has dropped to a relatively low level, will by definition undergo much more rapid economic development in terms of per capita income growth than other countries in which economic production is actually increasing at exactly the same pace but in which the death rate is dropping rapidly while the birth rate remains constant (or rises). The latter demographic constellation is found in many of the countries of Africa, Asia and Latin America today.

Expansion of production may be hindered by the difficulty of increasing the amount of land and other physical resources in use, in proportion to the increase of the labour force. While this hindrance to economic development is especially important in densely populated agricultural countries where there is little unused land suitable for agriculture, it also appears in some countries of relatively sparse population where conditions of climate, deficiencies of technology, or cultural and institutional factors hamper extension of agriculture to unused lands.

In addition to the rate of population growth and population density, the population structure has an obviously important bearing on economic development, since the relative proportions of economically active adults versus children and inactive elderly persons will determine the amount of production beyond the worker's own needs that can be used for savings and investment, and the amount that must be consumed by non-productive dependants in food, education and health services, as well as housing and community facilities. This means that two countries with initially equal labour productivity (production per worker) will have different rates of economic growth if, other things being equal,[11] their population structures differ. The economically under-developed countries generally have a population structure weighted heavily with children, owing to high birth rates, and although the proportion of elderly persons in their population is comparatively small, the net result is a considerably higher ratio of non-productive age groups in the under-developed countries than in economically more advanced countries.

Another population factor (also having political connotations) which can inhibit economic growth — sometimes only temporarily, if usable land area is extensive— but which has received much less attention is that of the absolute size of a country's population. This has acquired new significance with the independence of a number of African countries. Under modern circumstances, an economically under-developed country of small population, other things apart, appears to be at a disadvantage as far as economic growth is concerned. A small country is less likely than a large country to approach economic self-sufficiency and must lean much more heavily on exports and imports.[12] Since the economically developed small countries today rely as much as, or even more than, the economically under-developed small countries on foreign trade, it is not realistic to assume that, as the latter develop, they will reduce their dependency. Diversification of industry and agriculture, including the establishment of diversified small industries for processing agricultural products, as well as the production of foods now imported, is an important economic objective, but it can be carried only so far when the population is limited to two or three million or less. Certain types of industry are altogether excluded. To take an extreme example, only a few of the largest and wealthiest countries have the resources, the research and technical personnel and the market potentialities to establish an airplane industry. Economically developed small countries can, however, effectively engage in other industries, such as electronics or watch-making, which enjoy a good export market. But in the small economically under-developed countries today, many forms of industrial export are out of the question for years to come, because the economies of these countries are not technologically advanced enough to compete with such products in a world market.

The result of this situation is a continuing orientation towards the export of a limited number of primary commodities—together with the import of a variety of industrial items. The primary commodities in recent years have shown wide market fluctuations, indisposable surpluses and a generally unfavourable price trend vis-à-vis industrial products.[13] If present trends continue, and if the economic growth of the small economically under-developed countries is to be ensured, the choice would seem to lie essentially between, on the one hand, regional

[11] Ordinarily consumption standards will be lower in countries with high rates of dependency, so that investment will not be the only factor affected.

[12] See Simon Kuznets, "Economic Growth of Small Nations" in *The Challenge of Development* (Jerusalem, Hebrew University, 1958), pp. 9-25. Data presented by Kuznets show the ratio of foreign trade (sum of imports and exports) to national income to be 84 per cent in a sample of economically developed small countries that average 1.3 million in population, as against only 22 per cent in a sample of economically developed large countries, averaging 69 million population. Corresponding figures for economically underdeveloped small and large countries are 64 per cent and 38 per cent.

[13] See "Rural-Urban Relationships" in chapter I. The unfavourable price trend, whereby specific agricultural commodities have lost exchange value in relation to specific industrial products, has been a phenomenon of the last few years and may not necessarily be a permanent trend. More important, from a long-range point of view, is the fact that manufacturing industry continually expands by the addition of new products (e.g., television and air-conditioning in recent years), whereas agriculture does not; synthetics may substitute for certain agricultural products, and industries are continually learning to economize in the use of raw materials. The demand for industrial products as a whole therefore grows faster than the demand for primary commodities in a world market and the small countries relying heavily on the export of primary commodities that have but slowly rising demand therefore have a built-in long-range tendency to fall behind — unless the prices of primary commodities actually increase faster than those of industrial products.

or international market arrangements, or other economic-political confederations or amalgamations to permit greater diversification and specialization of production and more massive investment in key projects; or, on the other hand, some form of bilateral or international guarantee of trade income — protected markets, subsidies, etc.[14]

(2) *Institutional factors.* If the industrially advanced, high-income countries of the world are lined up and compared with the economically under-developed countries, a large number of differences in social institutions will be evident — in family systems, in the presence or absence of extended kinship and tribal systems, in the forms of community organization, in labour, welfare and recreational institutions and associations, in class or caste systems, modes of property ownership, political institutions, religious institutions, etc. For example, as a rule, at the higher levels of economic development the family tends to be smaller, more mobile, shorn of its economic production functions and of various functions assumed by educational, legal, police and welfare institutions of the State; but it remains a unit of consumption, and has even greater emphasis on psychological and emotional bonds and functions, as other bonds and functions diminish or disappear. Larger institutions based on blood relationship or presumed blood relationship, such as clans and tribal systems, with their multiple political, social and economic functions, disappear at higher levels of economic development; a complex network of independent or State-controlled institutions appears instead, based on occupation, recreational interests, residence, sex or age group, political affiliation, etc.

Some of the institutional forms in the less developed countries undoubtedly serve to hold back economic development. Proof, however, is difficult to come by, in view of the very multiplicity of the factors involved. It is practically impossible to exercise the kind of scientific controls (as in a laboratory experiment) that would be necessary in order to reach a firm conclusion as to which of these many institutional factors are really important for development — and how important they are ! — and which are superficial. Since most economically developed countries are European or of European origin, any distinctive feature of European culture, ranging from habits of dress to broad political and religious institutions, will automatically have a surface correlation with economic development. The danger is that the more obvious but less relevant features will be taken as the fundamental ones for economic development. The Pacific islanders who destroyed their ceremonial masks and regalia, organized their houses in rows like military encampments and marched up and down with sticks, in the hope of achieving the kind of wealth that they had witnessed among foreign military stationed on the island during the Second World War,[15] may have perceived correctly the general principle of the need for institutional change but erred in the application.

Among the institutional forms more generally cited as obstacles to economic development are caste and class systems that freeze individuals in ancestral occupations and reward them on the basis of birth rather than ability or achievement; autarchic family and kinship systems that discourage individual initiative and independent employment of family members; feudalistic and other antiquated forms of land tenure discouraging higher productivity by the agricultural worker; religious, semi-religious and communal practices that absorb large funds in ceremonials, and in investment in the goodwill of supernatural agencies or in status symbols; and social fragmentation, isolatio and lack of communications, particularly in rural areas.

It should be noted that European nations moved into the phase of industrial growth in the nineteenth century with a quite different historical background of social and political institutions and cultural systems from those of Africa today or those — still widely different — of Asia today; the world as a whole of the nineteenth century was also a quite different world from that of today. It cannot be assumed, therefore, that the less developed countries will or should go through the same institutional changes that Europe went through in its early stage of industrialization. Each country has the unique problem in development of building its future out of its own past.

While there are roughly discernible institutional differences between developed and under-developed countries, there is no simple one-to-one relationship between institutional form and economic development. Thus, both high productivity in industry or agriculture and low productivity are found under a variety of institutional forms. Institutions exist for reasons other than economic, and institutional changes may or may not be desirable for reasons other than economic social — justice, the dignity, equality and freedom of the individual. It is perhaps natural to believe that the kind of institution most desirable for non-economic reasons will therefore be inherently most effective economically. Other things being equal, a socially desirable institution may well be economically more effective for the simple reason that it is more socially desirable: it enlists the participation and motivation of the people concerned. There is evidence, however, that economic production, at least in industry, can take place at high levels even under a forced labour system in which individual morale counts for relatively little, being replaced by terror and similar strategies of the State.

When countries that have achieved exceptionally rapid economic growth during this century — for example, Canada, Germany, Israel, Japan, Puerto Rico, the Union of Soviet Socialist Republics and the United States — are examined individually, it will be seen that their economic development has in fact taken place

[14] In Latin America, the larger countries have now industrialized to a fair extent, but not the smaller countries, which are correspondingly lagging behind in economic growth (except in one or two cases where the export trade has been unusually favourable); this is a factor lying behind the Central American economic integration programme sponsored by ECLA, which is intended to provide a market covering five small countries for industries established in any one of them.

[15] See R. W. Firth, "Social Changes in the Western Pacific", *Quarterly Bulletin, South Pacific Commission* (Noumea), vol. 3, No. 4, October 1953, p. 27.

under a rather wide range of institutions — political, religious and social. The fact that a country has progressed economically with one kind of institution does not prove, of course, that it would not have progressed faster with another. An institution can have a braking effect, which is concealed by the net forward movement when powerful developmental pressures are at work.

The countries mentioned in the preceding paragraph as being among those having achieved rapid economic growth during this century do, however, have one institutional factor in common: namely, the important role of their educational institutions. Furthermore, much of the education is deliberately and strongly oriented towards technological change and economic progress, unlike, say, the educational systems of medieval European scholasticism or traditional Chinese scholasticism.

More generally speaking, what appears to be of primary importance in a social institution — from an economic development point of view — is, in the first instance, its orientation towards change and development, its readiness to adopt or support new technologies, and its influence on the abilities, attitudes and energies of individuals acting through it or controlled by it. A radical change of institution may be necessary in order to provide the occasion (and the symbol) for the release or growth of these forces and the achievement of a new orientation, especially when progress is prevented by vested interests. Alternatively, a social institution may in some cases adapt itself, without extensive changes in external form, to accommodate the goal of economic development, as, for example, in the adaptation of the Japanese family system at the beginning of Japanese industrialization,[16] or the adaptation of the English system of landlordism to modern agricultural development.

There are few institutional changes more widely recommended today than agrarian reform in economically under-developed countries, particularly where absentee landlordism directs its energies towards the maintenance of the *status quo* rather than towards development. At the same time, the peasantry in such countries is often illiterate, traditionalist and deeply conservative in nearly all matters except the distribution of agrarian income. Agrarian reform involving the transfer of ownership to this sector of the population, however desirable from the point of view of social justice, does not of itself automatically ensure economic development if the peasantry remains unchanged. In fact, experience shows that total production, or the amount of production available for urban consumption, often drops under these circumstances, at least temporarily, causing inflation and retarding industrialization.[17] The Food and Agriculture Organization of the United Nations (FAO) has recently given greater emphasis to institutional change in agriculture, but by this is meant not only changes in land ownership or land tenure systems when such changes are necessary, but also the introduction of new or improved credit institutions, marketing institutions and agricultural educational institutions, so that the total institutional system in agriculture will be strongly oriented towards development.[18]

Traditional institutions are often considered to block economic development because they prevent mobility, as when individuals are obliged by caste, class or family system to engage in the same occupations as their fathers and to remain in the same locality. In the larger urban areas, this is not as important a factor as it may have been at one time, however, because the cities of economically under-developed countries are usually overflowing with excess labour — labour that may be only too mobile in the sense of constantly floating back and forth between city and countryside and within cities looking for any kind of work. The chief difficulty in the case of this labour is lack of skills appropriate to modern employment; the problem is to a large extent one of education and training.

In the rural areas, the family tends to be an economic producing unit, and the large extended family, in which authority and status centre around the male head of the household or a council of elders, is generally seen as a strong, traditionalist influence, dedicated to customary ways and values and impeding the development of new methods of work and production. When the extended family is thus identified with the past, the smaller "nuclear" family would appear to be a more dynamic unit; at the same time it must be recalled that in many parts of rural Latin America the family is a small and often unstable unit, but not for that reason a force for development. In the Union of Soviet Socialist Republics, the collectivization of agriculture, together with decrees regarding the economic rights of women, played an important role in breaking down the extended family system, which was regarded as a conservative influence in various regions.[19] The "communes" in the People's Republic of China are undoubtedly having a similar effect.

While a rigid class system that immobilizes individuals in out-moded occupations and maintains masses of the people in a depressed state, without hope for personal advancement, is without doubt a serious obstacle to economic development by its very nature, it is more difficult to determine whether the extended family, clan or similar kinship group tends to inhibit economic change primarily because its structure and intrinsic qualities are incongruous with the demands of a modern industrial state, or primarily because it has simply been associated with pre-industrial ways of life and is the main repository of pre-industrial values. The obligations that the extended family places upon its members to share income are widely reported to be a drag on individual initiative

[16] See William W. Lockwood, *The Economic Development of Japan; Growth and Structural Change, 1868-1938*. Princeton University Press, 1954.

[17] This drop may be caused by re-distribution into economically inefficient small holdings as well as by loss of a managerial element, lack of any progressive tendencies among the peasantry, or a generally prevailing climate of disorder at the time of land reform.

[18] Food and Agriculture Organization of the United Nations, *Forward Appraisal of FAO Programmes, 1959-64* (Rome, 1959), pp. 55-63.

[19] See Vladimir Aboltin, *Social Implications of Industrialization in the Soviet Union*, UNESCO, SS/NAC/1960/7.

and on the accumulation of individual savings for economic investment. At the same time, the large family, if development-oriented, can also be a source of combined capital devoted to investment when other sources of credit are lacking. The non-rational bonds that hold together the extended family unit, leading to evaluation and placement of individuals by criteria other than ability and achievement (or the needs of the enterprise), are considered to be obstacles to efficient industrial organization and production. On the other hand these may also be the only bonds that will hold together an industrial enterprise at a particular stage of development in some societies. Certainly it is true that some of the most highly successful business enterprises in Europe were built originally on a family basis, involving the hiring of numerous relatives (even though the extended family in the form of a clan has not been a dominating social institution in Europe for a thousand years). There are many examples of inefficiency of family-based industries in less developed countries, but also numerous examples of situations where, as in India and Japan, extended family systems have been the social instruments of initial industrialization. In Japan, where industry grew at a rate by no means indicating inefficiency, " evidently the Japanese family principle as it came down from the past has tended even to impart cohesion and strength to other forms of corporate life in modern times."[20] Even today, to a degree quite surprising from the point of view of the organization of western industry, Japanese industry, according to some studies, still maintains features of the extended family: group incentive rather than individual incentive and responsibility, individual loyalty to the company, lack of separation between economic activity and social life, and other continuations of pre-industrial forms.[21] Competent lower-status young men have achieved higher positions by the process of being adopted, so that nearly 15 per cent of Japan's top business men today are adopted sons.

Another institutional factor frequently stated to be a major obstacle to economic development in the less developed countries is the absence of a middle class competent to initiate and carry out development; from this it is often concluded that the State must take over the function of initiating development. Here again the problem is in good part not one of lack of candidates for membership in a middle class or its equivalent but of lack of education and training; the State will not entirely avoid this difficulty by superimposing an economic planning bureaucracy on an unqualified populace. There are, however, other questions involved in this matter, including questions of lack of motivation towards investment and development even among the existing middle classes, as will be discussed shortly.

(3) *Individual factors.* It has been suggested above that social institutions affect economic growth to a large extent through their influence or control over the abilities, attitudes and energies of individuals, as these bear on economic production.

As far as the question of *abilities* is concerned, this is essentially a matter of education and training, which has already been mentioned. The question of the *attitudes* or *motivations* of the individual, as these affect economic development, is more subtle and evasive.

Attention is often drawn to the lack of an entrepreneurial attitude on the part of those individuals in less developed countries who do command a certain amount of resources. They prefer to have their money in land, causing undue inflation of land values, or in foreign investments. Faced with a heavy flow of funds from the outside, Switzerland now puts a charge on foreign funds placed for investment in that country (also, a recent law restricts real estate purchases by foreigners). Much of this money undoubtedly comes from under-developed countries where it is badly needed.

The reasons for the lack of entrepreneurial initiative (or of a class of innovating " entrepreneurs ") in industry in less developed countries are not entirely clear. Apart from more strictly economic interpretations (e.g., lack of opportunities and of markets), one reason commonly given is insecurity — there is not enough confidence in political, economic and social stability to persuade the individual to invest in an uncertain long-term project, such as building a factory.[22] The mercantile class, which may be fairly sizable, does not readily move into industry, any more than the landowning class does. If it makes local investments, it prefers to speculate in commodities, real estate or money-lending (often highly profitable), rather than to invest in equipment for long-term manufacturing which would add new values to goods. Quite often the mercantile class is ethnically distinct from the politically dominant majority of the population, with a tense and uncertain relation to it, and this may be a reason for hesitation on the part of the minority to make long-term investments.

The poorer classes in under-developed communities may hoard gold coins or store up food (or buy lottery tickets), but their attitude towards investment in new productive equipment, such as a new plough, also tends to be hesitant, often suspicious. In the least developed areas, the worker's attitude towards labour may entirely lack time perspective, let alone the concept of productive investment. For example, the day labourer in a rural area on his way to work, who finds a fish in the net he placed in the river the night before, is observed to return home, his needs being met. The worker in an urban area who receives an increase of pay works less and goes back to his native village so much the sooner. Such reactions — perhaps more the exception than the rule — are reported to change once the worker reaches a certain level of income and thereafter takes a less relaxed attitude towards economic matters. Similarly, once his income reaches a certain level, saving becomes a more established practice. Thus, attitudes towards work and

[20] W. W. Lockwood, op. cit., p. 497.

[21] See James C. Abegglen, *The Japanese Factory*. Glencoe, Ill., The Free Press, 1958.

[22] Major importance was attached to political stability, among other political prerequisites, as a condition of economic growth in Latin America at a recent meeting of experts: United Nations, " Report of the Expert Working Group on Social Aspects of Economic Development in Latin America " (ST/ECLA/CONF.6/L.2/Rev.1).

savings that seem to impede economic development exist, at least in part, for the simple reason that there is little or no economic development.

Some of the most extensive and detailed analysis of the role of psychological attitudes and values in economic development has been carried out in connexion with religious values. The views of Karl Marx on religion in general as an opiate deadening the masses to demands for material betterment have received much attention. In recent decades, western social scientists have given much attention to the theories of Max Weber, who wrote in the early part of this century on the role of Protestant "inner-worldly asceticism" and the Protestant conception of work as duty, as an explanation of the economic progress of Protestant peoples. Economic trends in the last few decades, including trends in China, France, Italy, Japan and the Union of Soviet Socialist Republics, show that rapid economic growth can take place in various constellations of religious or anti-religious values.

The complexity and subtlety of the whole question of psychological factors affecting economic development may be illustrated by reference to a current hypothesis that "achievement motivation" of the individual (and, derivatively, the rate of economic growth) is related, among other things, to the status of women in society, especially in the family setting [23] — this motivation being weaker when the child is brought up in an authoritarian family where status is pre-ordained by age and sex. In a different context, Soviet theorists have laid considerable emphasis on the equality of women as a factor in economic development.[24] There is also some evidence from field studies that change in the status of women can be a force breaking the crust of tradition and can thus facilitate the subsequent entry of economic and technological changes.[25]

A common psychological obstacle to economic achievement is the fact that much higher status tends to be associated with land ownership or government position or professional or intellectual activity than is enjoyed by the business man, engineer, mechanic, agronomist or other type of person concerned directly with material production.[26] Closely related to this is the widespread aversion of persons who have acquired some education to working with their hands or dealing directly with material things (rather than with people or with pieces of paper). This causes perhaps the greatest difficulties among populations with a caste or class system — or with psychological remnants of such a system founded in feudalism or in military conquest — in which those at the bottom have traditionally engaged in the (manual) labour of production and those at the top, controlling the land and property, have engaged in military, religious or intellectual activities or in government administration. The aversion can be found among the least economically developed societies, as, for example, among certain desert nomad tribes that traditionally used only slaves, captured in fighting over water holes, for manual labour. The problem of the status hierarchy of occupations carries over into education, resulting in an excess of students in courses aimed at white-collar jobs,[27] and even some of the most highly developed countries today are still deeply concerned about the fact that the employment inclinations of their youth do not correspond to the employment needs of their agriculture and industry.

The question of the *energy or physical capacity* that the individual is able to bring to economic activity is to a large extent a matter of health. Endemic diseases, bringing a host of parasites into the body, sap energies that might otherwise be available for productive work. Malnutrition has a similar enervating effect. These conditions also have strong psychological effects on drive and ambition. The true impact of ill health on production, taking into account not only days lost, but also days worked at feeble pace, is difficult to assess, but it is no doubt substantial. Until recent times, diseases like plague, cholera, malaria and even tuberculosis have played a substantial role in hampering development, and in some areas endemic diseases are still a serious obstacle to development. Improved health conditions, on the other hand, have not only reduced the economic (as well as the human or social) losses caused when children fail to reach the productive age group, but have also substantially increased the span of productive life.

Another factor affecting individual physical capacity is climate, which is no longer discussed today as much as in the past. If the industrialized countries are marked on a map, they will be seen to be located as a rule in a colder climate than the under-developed countries. This correlation with climate is as good as most correlations between non-economic factors and economic development. There is an open question as to its significance — that is, whether climate itself or one or more factors associated with climate is the true causal agent. The energy level of human activity no doubt tends to be reduced in a hot, tropical climate (although air-conditioning can, of course, change this picture); also the colder climate possibly presents more of a challenge or demand for mechanical energy and material production. After receiving perhaps an exaggerated importance in the early part of this century from a number of theorists and then being neglected, the role of climate and its significance for industrialization, particularly for the industrialization of under-developed tropical countries, needs some renewed attention.

[23] See David S. McClelland, "The Achievement Motive in Economic Growth", a paper prepared for the North American Conference on the Social Implications of Industrialization and Technological Change, Chicago, 15-22 September 1960, p. 18.

[24] See V. Aboltin, op. cit.

[25] For a discussion of the inter-action of social and technical changes within a village setting, see Morris E. Opler and Rudra Dutt Singh, "Economic, Political and Social Change in a Village of North Central India", *Human Organization* (New York), Vol. II, Summer 1952, pp. 5-12.

[26] One explanation for the exceptional level of economic achievement often found among ethnic, religious or other minorities or "deviant" groups in a population is that, being outside the established social system and unable to gain status in it (as by land-ownership or government position), they tend to devote their energies to the one major sphere that is open to them for achievement — business activity (but more in commerce and money-lending than in industry).

[27] It is reported that less than 4 per cent of the students from under-developed countries who go to the United States to study take up the study of agriculture, in spite of its fundamental importance to the development of their countries.

Human investment and capital investment

The concept of human investment

Negative social factors acting as obstacles to economic growth have a necessary logical counterpart in positive or permissive social factors. If one kind of social condition can hold back economic growth, another kind can facilitate it. Concern with the more positive influence of social upon economic factors represents the third — and the most recently popular — major line of interest in the interrelation of social and economic development. This interest has centred on the subject of " human investment " (or, less frequently, " social investment "), in the context of economic development planning.

The concept of human investment serves to correct an over-simplified picture of economic growth. According to this picture, economic expenditure on capital equipment, classified as " productive investment ", is contrasted with social expenditure benefiting individuals, classified as " non-productive consumption ". It is further assumed that the way to achieve economic growth is to maximize the economic capital expenditure and minimize the social expenditure. A given rate of capital investment — depending on the rate of population growth — is judged necessary to achieve a given rate of growth of per capita income, i.e., of economic development. The higher the rate of such investment, and consequently the lower the rate of social expenditure, the faster the economic growth.

The above picture transfers too crudely to the complex realm of national economic development a set of assumptions drawn from the economics of enterprise. At the level of the enterprise, substantial expenditure for education, health, housing and other benefits to individuals is ordinarily not required, since it is taken care of by other institutions, public or private; such expenditure may therefore appear to be non-economic, or in competition with the essential economic expenditure. From a broad point of view, however, it is obvious that the men who invent, build, maintain and run equipment — and the social institutions that permit or encourage such activities — are as important as the equipment itself for the eventual production. There is accordingly much more to expansion of national income than conventional capital investment.

A number of outstanding scholars in the field of economic development have recently given increased attention to the human or social factor in development.[28] For example, research carried out in the United States of America by the National Bureau of Economic Research provides evidence that, in the economic growth of that country, " increase in volume of tangible capital goods has undoubtedly played a significant role in raising labour productivity, but it has not been the dominant one ".[29] In manufacturing, output per unit of capital input has not remained constant but has risen significantly, particularly since about 1920.[30] Agricultural production has also risen faster than can be explained by the rate of capital growth. In fact, " production in the United States has risen twice as fast as labour and tangible capital input combined, over the past two-thirds of a century ".[31] Part of the growth in per capita production that cannot be ascribed to conventional capital investment is no doubt due to such factors as the fuller use of equipment and " external economies " in the broadest sense of the term, but, in the opinion of economists who have analysed these results, a major explanation must lie in the " human factor ", including the development of education, technological skills and health.[32] A recent study in Norway has reached a similar conclusion,[33] as have studies in other countries.[34]

It follows from the above that, if certain intangible human factors are as important as tangible capital investment for economical growth and considerably more important than some kinds of tangible capital investment, then any simple picture of opposition between capital investment (promoting growth) and social expenditure (diverting funds from growth) cannot be maintained. Indeed, if the conclusions of some students of this subject are to be accepted, there can be an excessive diversion of available resources into conventional capital investment, leading to an imbalance which can retard the rate of growth, just as there can be an excessive diversion into social expenditure.[35]

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[28] " For studying economic growth . . . the key is not in the physical stock of plant and equipment; it is in large part in the capital invested in human beings and in the whole economic and social structure that conditions the use of plant and equipment " (Simon Kuznets, " Population, Income and Capital ", in " Factors of Economic Progress ", *International Social Science Bulletin*, vol. VI, No. 2, 1954, p. 170). " . . . If economic growth is thought of as a self-sustaining process, there is little doubt that investment in transport, communication and education have most to do with changing people — which is likely to be the critical ingredient in the growth process." Charles P. Kindleberger, *Economic Development* (New York, McGraw-Hill, 1958), p. 163.

[29] United States National Bureau of Economic Research, *The Study of Economic Growth, Thirty-Ninth Annual Report*, May 1959, p. 5. See also *ibid., Thirty-Fourth Annual Report*, May 1954, pp. 3-13.

[30] See John W. Kendrick in " Government in Economic Life ", *Thirty-Fifth Annual Report* (United States National Bureau of Economic Research, May 1955), p. 46.

[31] *The Study of Economic Growth*, op. cit., p. 5.

[32] See T. W. Schultz, " The Role of Government in Promoting Economic Growth ", in *The State of the Social Services*. Leonard D. White, *ed.* (University of Chicago Press, 1956), p. 379; see also by the same author " The Economic Test in Latin America ", *Bulletin* 35, Cornell University, New York State School of Industrial and Labour Relations, August 1956.

[33] See Odd Aukrust, *Investments and Economic Growth, Study prepared for the Meeting of Economists of the Five Nordic Countries*, Copenhagen, 4-6 September 1958 (original in Norwegian).

[34] See the studies on the growth of agriculture in Brazil and Argentina cited by T. W. Schultz, " The Economic Test in Latin America ", op. cit., and the Finnish study by Olavi Niitamo, cited by O. Aukrust, op. cit. See also W. B. Reddaway and A. B. Smith, " Progress in British Manufacturing Industries in the period 1948-1954 ", *Economic Journal*, London, March 1960.

[35] Myrdal considers that under-developed countries today may be making this mistake. " There is no doubt that very generally the poor countries in their understandable eagerness to raise production levels in agriculture and industry rapidly are putting too little emphasis on the need for productive investments in human beings and directing too little attention to the need for raising labour efficiency " (Gunnar Myrdal, " The Theoretical Assumptions of Social Planning ", in *Transactions of the Fourth World Congress of Sociology* (London, International Sociological Association, 1959, vol. II, p. 162).

"Human investment" is, unfortunately, not easy to define. It may be vaguely described as investment in the "social infra-structure" of economic growth, a concept that itself requires definition. The human qualities that promote economic growth are variously identified as knowledge and skills, technological capacity, efficiency, organizational capacity, initiative, energy and hard work, mutual trust and honesty, security and confidence in the future, inventiveness, mobility, "universalism", rationality, entrepreneurial ability, progressive outlook, ambition and drive, achievement motivation, etc. But lists of desirable qualities do not generally give a very clear idea of the kinds of investment a country can and should make in the social field to promote economic growth. Governments cannot create such qualities by legislative fiat or budgetary appropriation. There are no operative branches of government in sociology and psychology disposing of funds to cultivate directly the desired qualities.

In large measure the question of human investment comes down, in government practice, to a question of the expenditures of existing ministries or departments in such fields as education, health, housing, labour and social welfare. The difficulty here is that most of the expenditures of these branches of government — apart from expenditure on certain forms of scientific research and technical schools — are ordinarily not designed for whatever economic effects they may have. They have their own purposes, and can rarely if ever be considered in their entirety as economic investment expenditure — just as they cannot be considered in their entirety as merely competitive expenditure draining off resources from economic development. They are both complementary and competitive in varying degrees, some being more relevant and urgent for economic development than others.

Investment and consumption

Social expenditures of government must be distinguished from private "consumption" expenditures of individuals, although the latter expenditures can be, to a greater or less extent, controlled through government monetary and fiscal policies, especially taxation. The private consumption expenditures are not generally assumed to be a form of investment. Very often the fundamental policy issue is not competition between public economic and public social expenditures, but between economic and social (and other) expenditures of government, on the one hand, and expenditures for private consumption (especially for "luxury" consumption), on the other. As a general rule (with important exceptions), Governments with high economic expenditures tend towards high social expenditures as well, and conversely, low economic expenditure tends to accompany low social expenditure (see chapter IV).

This need not imply that a higher level of private consumption is necessarily a negative factor for economic development. Indeed, although the semantics may appear paradoxical, the argument has in effect been made that higher private consumption under some circumstances can be an investment essential for economic growth.[36] The problem is to distinguish categories of private consumption that are economically necessary or advantageous from those that are not. There is a danger that a higher level of private expenditure may mean primarily the purchase of non-essentials by the better-off section of the population, while an "austerity" programme to reduce private expenditure can mean primarily a cutting-down or holding back of the consumption of essential goods by the poor (see chapter I) and even a constriction of the market for domestic production.[37]

Economists would no doubt generally agree that expenditures not only on conspicuous consumption of luxuries but also on ceremonials, games, gambling, tobacco, alcohol and other kinds of recreation are not to be classified as forms of human investment. Yet the position may also be taken that a certain amount of relaxation and pleasure is a necessity for economic development.[38]

The causal relationships between private consumption and economic development are uncertain and speculative partly because of the role of psychological or motivational factors. A minimum level of private consumption is required for elementary physiological reasons. Private consumption beyond this level is not physiologically required; it may however, be psychologically required (unless other motivations are present) as an incentive to work. The availability of industrial consumer goods, for example, is widely regarded as an important incentive to greater agricultural production in under — developed areas. In some circumstances, a minimum level of private consumption is a political necessity — otherwise the population, heedless of economic development theory, may engage in strikes, riots and violence to obtain what they consider to be a satisfactory level of consumption. Such contingencies cannot be written into investment formulas. In general, the readiness of a population to dedicate itself to greater efforts for economic development will depend upon its feeling of sharing in the benefits.

As mentioned above, education and health, among government programmes, are often identified as forms of human investment and sometimes singled out as the most critical investments for economic growth; yet in

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[36] "If a larger consumer outlay on a given type of goods is required so that human beings are to perform efficiently as members of the productive system and thus assure higher income per capita, then clearly the higher consumer expenditures per capita are a prerequisite, a compulsory accompaniment of higher per capita income, and industrialization and urbanization . . ." (Simon Kuznets, "Consumption, Industrialization and Urbanization", UNESCO, SS/NAC/1960/5, pp. 10-11).

"... at the very low levels of consumption in the poor countries, and particularly in those of them where a large portion of the population is undernourished, increased consumption may be a productive investment in higher labour efficiency" (Myrdal, op. cit., p. 161).

[37] It should be noted that an austerity programme can involve concentration of funds in long-range educational, health and social welfare programmes, so that it must not be confused with economic, as contrasted with social, expenditure.

[38] See S. Kuznets, "Consumption, Industrialization and Urbanization", op. cit., p. 11.

practice they, too, are commonly classified under " consumption " expenditures.[39] Many of the social expenditures (public and private) can, in fact, be regarded as both investment and consumption, demonstrating the difficulties of the concept of investment. Thus, good health is something to enjoy for itself and at the same time promotion of good health may be considered a form of investment in human beings, increasing their efficiency as agents of production; the same is true of education.

The concept of human investment incorporates into the language of economic analysis social activities that are not carried out with economic intent, although at the same time they can have important economic effects. Immunization of children against poliomyelitis may pay off economically, but that is not the purpose of the inoculation. In so far as the concept of human investment implies an economic intent, its use in these cases is metaphorical. In view of the great emphasis that is given to economic development today, there is a danger of seeking to find an economic rationalization for every social programme. Social programmes, however, have no simple and consistent relationship to economic development. They are of wide variety, with varying economic implications. It is wishful thinking to assume that each of them will contribute substantially to economic growth.

The effects of social programmes on economic growth

The very same kind of programme may promote economic development under one set of circumstances and retard it under another. As indicated above, a *public health programme* can improve the quality and productive capacity of labour, thereby helping to raise national income, particularly if there is a labour shortage; but if there is already heavy pressure of population on land, and no outlet for surplus labour through industry or migration, the chief economic result of lowered mortality rates — not counting the social benefits — can be an increase of under-employed or unemployed labour, lowering per capita income. The same social expenditure under the same circumstances is apt to involve a mixture of economic benefits and non-benefits which are hard to separate. It would be extremely difficult to separate expenditure involved in, say, the establishment of a sewage disposal system, or the building of a hospital, into expenditure promoting economic growth through its effects on human beings and expenditure not promoting such growth. It would be even more difficult to define the size of the eventual economic returns from such expenditures.

In *education*, the picture is no clearer than in health. Education focused on technology and a minimum of literacy may be classified as " productive ", while education addressed to the enrichment of lives through literature, history, art and the humanities is apt to be regarded as " consumption ".[40] Expenditures on these two different types of education are hard to disentangle, however, particularly with the modern tendency towards " comprehensive " schooling. Also, the study of literature and the humanities at the primary and secondary level may play a significant role in transmitting those values of enterprise, self-improvement, personal achievement and like qualities that are presumed to have a positive influence on economic growth. It is well known that in economically under-developed areas, as in rural Africa, the introduction of a general education can have a powerful impact in causing young men to leave their native villages, give up traditional culture and economy and seek a better life in cities (where, unfortunately, not finding jobs, they often roam the streets and engage in delinquent activities). A formal education that inculcates the values of ancestral ways and prescribed status will presumably not be helpful in promoting growth that demands constant innovation; but a general liberal education that stimulates the student to inquire and question, to seek new perspectives beyond his present environment, to improve his status and to broaden his understanding, may be a vital element in establishing a climate favourable to economic change. Technicians to an important extent can be imported, but a generally educated population cannot. From available evidence, therefore, it is difficult to draw any firm conclusions as to economic returns of a general education.

It is commonly agreed that the formation of a *skilled labour force* is an important area of human investment. The economic value of vocational training, vocational guidance and employment services would seem obvious. Other kinds of labour programmes are more controversial. Thus, it has been argued that the premature raising of labour costs through minimum wage legislation, pensions, compulsory annual vacations, maternity leave, etc., will slow down capital formation, reduce employment and drive away outside capital.[41] Higher labour costs should follow, not precede, increases in productivity. On the other hand, it may be argued that such benefits are essential to labour morale and labour stability and thereby can have considerable influence on productivity. The view has been put forward that minor wage increases may have little effect but that there is a " threshold of modernity ", a level of income above which a worker may suddenly go through a transition and acquire the reactions of an urban industrial citizen, responding to incentives to earn more by more work and more efficiency.[42]

It does not necessarily follow that higher labour costs will divert equivalent funds from capital formation. The cost increases may act as a spur to management to expand sales or to increase efficiency and thereby lower costs of production by reducing waste, reorganizing

[39] Social expenditures are, of course, themselves classified as capital investment expenditures (e.g., construction of schools and hospitals) and current expenditure (e.g., salaries of teachers and nurses). This is something quite different from the subject under discussion, i.e., whether the expenditures contribute to economic development and may be treated as an investment from that point of view. A current expenditure on education may contribute more than a capital expenditure on education to economic development and thus be more of an economic " investment ".

[40] See Charles P. Kindleberger, op. cit., especially chapter IX, " Balance Versus Priorities ", p. 152. Kindleberger does not indicate where the social sciences (economics, sociology, psychology, etc.) should be classified.

[41] *Ibid.*, p. 229.

[42] See ILO, *Report of the Director-General*, 1959, p. 54.

work, etc. It is quite possible that the increase in production per unit of capital input in the United States, mentioned above, may have been spurred in part by the pressure from a constant rise of wages and labour benefits.[43] Increase in labour income also increases demand and expands the market for manufactured goods, thereby stimulating and sustaining economic growth. The fact is that, in most countries that have enjoyed rapid economic growth during the last century, the income of labour has also risen rapidly. Whether the rise in labour income has always been a consequence rather than a stimulant of expanding production is a theoretical question difficult to answer. In any case, the same considerations may not apply to economically underdeveloped countries where industry is in a precarious condition; what is a stimulant in a strong, expanding economy can have different effects elsewhere.

Social security schemes, public assistance to the poor, aid to homeless children, homes for elderly people and similar social services for special groups in need are generally considered to be social activities that do not contribute to economic growth, but divert funds from it by competing for limited resources. A society that neglects its children in need and its invalids and aged would no doubt grow faster economically, although there may be some question as to what it would grow into. In certain cases, as in that of unemployment insurance in economically advanced countries, social security payments serve as automatic economic " stabilizers ". Also, public distribution of funds during periods of recession or depression may promote demand and help restore productive activity when capital equipment stands idle. This argument does not apply in an unqualified way to countries whose problem is not so much idle productive capacity as lack of capital resources and equipment complementary to available labour. Extensive distribution of public relief funds, or relief in the form of subsidies, under these circumstances, is apt to cause inflation, as a major result, if the supply of goods cannot be readily increased to meet the additional income put in circulation.

Housing is another field where expenditures are usually considered to have relatively little economic output value, although again there is no way (at least at present) of measuring what the effects may actually be, and they would appear to vary greatly according to the circumstances. In an industrializing area, the economic value, to the industry, of constructing workers' housing may be relatively low if labour can be recruited locally, or can find its way into existing housing, or is able to construct its own housing; but under other conditions, housing provided for workers, or some form of assistance in housing, can have very real economic advantages. It may be an important factor, for example, in persuading " floating " labourers to bring their families with them and settle down in the neighbourhood, so that the labour force will become stabilized and the very high costs of labour turnover will be cut, to the considerable benefit of industry. Many industries in economically less developed areas have voluntarily adopted the policy of providing housing for their workers, and presumably this has not been entirely for humanitarian reasons. Such housing, in fact, is apt to be listed as part of the necessary capital investment costs of the enterprise. When, however, the State assumes direct responsibility for low-cost housing for workers, the expenditures become " social " expenditures and are regarded as competition with economic investment. It may be noted that low-cost housing has the advantage of a generally low import content, thus making only moderate claims on the country's foreign exchange resources, while at the same time a low-cost housing programme may create employment among construction workers and produce demand for domestic construction materials. Also housing, like education and health, is an object for which people may be willing to make certain funds available — through taxes or from personal savings — that would not be made available for other purposes; such funds are therefore not actually " diverted " from economic development.

Difficulties in determining the economic returns of human investment

The preceding discussion has demonstrated some of the difficulties of trying to determine the economic output value of certain social programmes viewed as " human investment ". These difficulties arise because the social programmes are not really designed as forms of economic investment; their economic effects are complex, indirect, dependent upon numerous contingencies, and often mediated vaguely through the social climate or through formative influences in childhood. The role of social factors in economic development cannot, in general, be conceived as a simple mechanistic cause-and-effect or input-output relationship. To an important degree the social influences operate as a context or field of forces, inevitably but imperceptibly affecting each economic event. Moreover, the economic significance of investment in a particular social field in turn depends upon the total pattern of development. A higher rate of investment in, say, secondary education just as in transportation may be a requirement for economic development, or it may be a waste (in purely economic terms), if it leads only to an increase in the educated unemployed.

It may be questioned whether, as a means of coordinating economic and social development, the pursuit of the concept of human investment in the direction of trying to determine in the abstract the economic return for each and every category of social expenditure is really feasible. It is extremely important as a strategy of development to examine economic implications and select, as far as possible, from among specific alternative social programmes directed toward the same goal, those programmes that can be shown to be economically most

[43] There is a somewhat analogus situation in certain cases of land reform, where production per unit of land has gone up not because of the greater motivation of the new owners but because the old owners, deprived of much of their property, have responded with efforts to compensate for their loss through increased efficiency of production. Farmers in the United States who have reduced their crop acreage under the " soil bank " programme have shown a remarkable capacity to increase the production of the remaining acres, through improved technical means.

advantageous. It is equally important to examine alternative economic strategies — e.g., regarding types or location of industry — and select those that are socially most advantageous (see chapter V). It is also of great value to estimate mutual requirements of economic and social development where the cross-relationship is relatively simple and direct, as in manpower requirements for a projected economic expansion, or housing requirements for workers in a given industrial project. But in broad areas of social activity that are ends in themselves, and not directly related to an economic undertaking, such as the extension of primary or secondary schooling or the promotion of public health or housing, the search for measurable rates of investment returns to serve as a guide for public expenditure policy is apt to be in vain — although valiant efforts have been made — and another approach is called for to deal with the policy question of determining allocations in relation to economic conditions. This subject is further discussed below.

In view of the complexities and uncertainties surrounding the role of social factors in economic development, including the difficulties of measurement, it is not surprising that many economic planners should be discouraged from trying to handle such factors in economic analyses and programming. Even if an acknowledgement is made of the importance of the social aspects, these aspects tend, in practice, to be kept out of the picture. Thus, a distinguished expert in economic development at one point notes that education is "a very important condition for development" but disavows the consideration of it as a part of economic policy;[44] and, at another point, he writes that "to compare the advantages of an electricity plant with those of... a school will always be difficult, but at least it can be made clear what increase in material production is sacrificed if a school... is built".[45] It might be said alternatively that this is precisely what cannot be made clear; the possible contribution of the school to material production is beyond measurement at the present time but not beyond conception.

Given the methodological difficulties, the economist is tempted to confine himself to a few selected economic variables that are familiar, manageable and measurable, and to concentrate on studying the relations of these variables to each other in formal "models".[46] A similar confinement of professional interest will be found in the case of social policy makers whose concern with economic problems is apt to be limited to the question of how to obtain more funds from the budget.

Mutual requirements

Analysis of mutual requirements is an approach to social economic interrelationship that is more limited, and more manageable technically, than the concept of human investment. When in development planning or programming a production goal is set, specific requirements for meeting it are determined, including specific social requirements. This is a somewhat different question from that of human investment (although related), since it involves a working backward from a given target or goal, along lines of specific and direct relationship. If the target is the production of a given amount of steel, then computations can be made of the requirements in terms of iron, coal, transportation, construction, etc. The production of iron, in turn, will have a set of requirements, including steel, transportation, etc. Consideration of these implicated requirements and "complementarities" lies at the very core of development planning (see chapter V). The procedure used in the Soviet Union in this regard is called the "balancing" method. Social factors can come into such a system in two ways:

(1) Certain social requirements, as in personnel, are established by the very nature of things. For a given economic undertaking, a body of labour of given size and qualifications must be available — so many engineers, so many skilled workers, etc. are required. This in turn can set up further requirements of training and have ramifications into questions of school construction, etc.

(2) Certain other social requirements are imposed by the standards that a country has legally adopted regarding facilities and services for the workers' health, safety, recreation, social security, housing, family welfare, etc. It must be emphasized that these standards themselves are given to the economic planners; they impose requirements but they are not determined by computations of economic requirements. Although economic capacities are taken into account and ideas of economic benefits may be involved in their formulation, such social standards are equally or even more determined by considerations outside the economic field.

It should be noted further that the technical analysis of requirements in economic development planning does not extend to the broad areas of social activity that are ends in themselves. Even the most highly planned economies, such as the USSR, do not decide upon their levels of general education, health, social security, etc.

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[44] J. Tinbergen, *The Design of Development* (Johns Hopkins Press, 1958, for the Economic Development Institute, International Bank for Reconstruction and Development), p. 5.

[45] *Ibid.*, p. 30.

[46] "... ever since the middle of the nineteenth century demography and population theory have been excluded from the corpus of orthodox economics, and only in the two most recent decades have economists been turning in haste to relearn something about demographic process; just as demographers are beginning to recognize the dire consequences of their neglect of economics. The situation with respect to history of science and technology and the understanding of what moves it is even sadder, and our ignorance of these key processes in economic growth is truly appalling. Nor need I add a similar comment about the clearly increased importance of political and socio-psychological factors in the understanding of the economic growth of nations; or the helplessness of a mere economist when he observes, when he can observe, results of economic growth obviously ascribable to political factors and forces whose nature he cannot understand adequately. The outcome is either withdrawal into the refuge of mathematical models operating with a few variables, or amateurish cogitations on a vast theme. One has the advantage of formal elegance, and the other, that of at least calling attention to the wider array of factors that have to be taken into account; but neither outcome is satisfactory." Simon Kuznets, *Items*, Social Science Research Council, XII, No. 2, June 1959, p. 15.

simply by computing economic requirements (or investment returns from allocations to these fields). The decisions on these matters are made by political bodies and go beyond the economic planning apparatus.

Analysis of requirements in development planning can be approached from a social perspective. Instead of setting economic targets and determining social requirements, it is possible to set social targets — e.g., specified levels of health, education, housing, employment, personal income and consumption, etc. — and to determine economic requirements. This in fact is done in sectoral planning in social fields. Over-all national development planning is ordinarily directed more towards economic than social targets — generally towards the achievement of a specified increase in the per capita national income. There is no logical or philosophical reason why this has to be so, particularly in view of the fact that the achievement of social goals — the raising of the standards of living of the population — is commonly stated to be the final purpose of economic development. It is theoretically conceivable that a country could set its major targets to be achieved in five or ten years in terms of specified advances in the level of living, and derive the economic targets therefrom. To a certain extent, this has been undertaken by countries like the Netherlands and Norway that have set as the explicit guiding goal of their development efforts the elimination of unemployment. Social goals in their own right, together with economic goals, are also incorporated in development plans of a number of countries, particularly where the plans embrace the totality of government expenditure. Often, however, the social goals are covered in the normal budget, while the developmental budget covers only those social programmes directly required for the economic objectives.

In the discussion of mutual requirements to this point, the emphasis has been on the requirements to meet specified goals in a given sector. Goals set in sector A make demands for certain developments in sector B. Developments may, however, take place in sector B quite independently and impose requirements affecting the goals, targets, or policies in sector A. For example, a projected industrial expansion may establish certain labour force requirements, but demographic trends affecting the labour force may also set up certain requirements for industrial expansion. Practically no countries today deliberately control their rate of population increase; accordingly this rate establishes certain economic requirements — if employment is to be maintained — as children move up through the age groups into the labour market.[47] Social policies having to do with school-leaving age, age of retirement and employment of women will also have important implications for the size of the labour force and hence for economic policy.

In general, of course, the main economic requirements imposed by social programmes are material resources. These can usually be anticipated. When several substantial social changes are taking place simultaneously, however, the combined effect on requirements may be quite unanticipated. For instance, health programmes and universal compulsory education programmes undertaken at the same time have unexpectedly strained the economic resources of certain countries because the health programme caused mortality rates to drop and greatly increased the number of children who had to be covered by the education programme.

Differential rates of growth

As will be demonstrated in chapter III, the different sectors (industry, agriculture, health, education, etc.) tend to grow at different rates, with the pattern changing at the different levels of development. These varying rates of growth may set up requirements across sectors that are difficult to meet, resulting in conditions that are called "unbalanced". One illustration is the inflation caused in food prices by faster growth in industry than in agriculture (demands arising from industrial expansion raise the prices of food in non-expanding agriculture). The differences in rates of growth are due in good part to the effects of modern technology. For example, there are highly effective modern technical and scientific means utilizable for rapid progress in health in economically under-developed countries (up to a certain limit) without too heavy investment, but such means are not available in education or housing construction.

A policy question arises whether in the national framework the fast-moving sector should be rewarded and encouraged as a growing point or the slower moving sector helped to keep up. An argument is advanced for the former policy within the economic field, on the grounds that an expanding sector (e.g., manufacturing industry) may pull up the other sectors (e.g., transportation) with it by creating demands or requirements that force decisions to build up these sectors.[48] It is doubtful

[47] Japan is to some extent an exception to this statement. At the same time Japan is still faced with large changes in the labour force emerging from past demographic trends. See Irene B. Taeuber, *The Population of Japan* (Princeton University Press, 1958), pp. 383-385.

[48] See Albert O. Hirschman, *The Strategy of Economic Development*. New Haven, Yale University Press, 1958. Sushil Dey has emphasized the fact that a limited amount of "imbalance" may be healthy and normal, but beyond this limit it becomes an impediment:

"... Growth is possible only if it is multilateral and, consequently, balanced at each step. If the output of a particular enterprise were to expand beyond the capacity for expansion of other enterprises, there would be no matching supply, and further progress would be halted by over-production.

"But this principle of multilateral expansion or balanced growth must contain within it its own negating element. At any particular moment of time, one particular enterprise, or one producing unit out of a number of such units in any one enterprise, must be free to step out slightly in advance of the others. This exerts a forward pull on the others, which then strain to catch up with it. This is the element of imbalance which is necessary even for achieving balanced growth...

"But this imbalance cannot be large or sudden. It has to be moderated, so that other units and other enterprises are capable of achieving a new adjustment among themselves and attain a fresh balance at a higher level..." Sushil Dey, "The Dialectic of Industrialization", *Annual Capital*. Calcutta, 1955.

A question of semantics is involved. It would perhaps be better to reserve the word "imbalance" for those conditions judged undesirable for economic or social reasons and use another term for the situation in which a particular sector moving forward has a healthy effect on the economy — or else to use another term for what is conceived of as imbalance in the resolutions of the Economic and Social Council and in the present report.

that this same approach, whether or not valid within the economic realm, applies very extensively to social factors in their relation to economic factors and to each other, partly because of the indirect nature of these relationships — there is often no direct pull in operation. With the lack of communication and responsiveness to the forces of demand, as well as the lack of appropriate institutions, even clear requirements for trained personnel in economically under-developed countries have not led to the creation of the personnel needed. The problem in most cases is not stimulation of demand and the creation of further "dynamic" imbalances, but the solution of existing imbalances which are a drag on development. It would not be reasonable to maintain that, if health has improved more readily than education, education should therefore be given less attention on the grounds that improved health will pull up the education level. While there will be a certain effect of this kind, the major effect in the long run will be that lack of education will keep the health level down.

A somewhat similar question arises in regard to progress in different parts of a country: Should rapidly growing industrial areas be favoured by government expenditure policy because they are moving ahead, producing more, and provide "external economies", or should the slower moving or stagnant areas be favoured because they are holding back the total development? To what extent the backward economic areas will be pulled up by the expanding areas or will act as a drag upon them — or will become isolated in a dual economy — is a question for economic analysis. There is also, however, a social welfare question involved, and in these circumstances countries may give the benefit of the doubt to the depressed areas. Policies followed in this regard will be discussed in chapter V.

Differential rates of growth in productivity affect income distribution, with resulting social problems. If, for example, the productivity of the industrial worker goes up rapidly, while the school teacher can handle no more students today than a hundred years ago, should the industrial worker share in the benefits of his increased productivity, but the school teacher obtain no increment in income? If so, there could be a drop in the quantity or quality of school teachers, with a consequent reduction in a country's knowledge and training which, in the long run, helps to make increased industrial productivity possible. (It may be considered that the productivity of school teachers goes up even faster than that of industrial workers because of the advances in the knowledge they impart, but this is not economically measurable.) The case of the school teachers is only part of a larger social problem of the way in which a society rewards those whose contribution to economic development is not measurable but yet, indirectly, is a required contribution. Scientists and research workers are another category. The accelerating growth of scientific and technological knowledge emerging from their work, while not having measurable market value, is probably the most important single factor sustaining and promoting economic development, viewed in the long perspective.

Advances in technology can, however, in some circumstances also throw the economy temporarily out of balance by causing a greater production of goods than is required, particularly goods for which there is a relatively inelastic demand. This is the situation, for example, in some of the most highly developed countries, where agricultural productivity has recently grown much faster than demand for agricultural products (see chapter I). Measures to support prices, and hence the income of those caught in this situation, are essentially social in nature but unfortunately may serve to aggravate the economic difficulty by subsidizing continued over-production (or under-employment).

In some cases the initial establishment of a new economic undertaking represents a great leap forward in productivity, but thereafter productivity increases very slowly, if at all. For example, the establishment of a railroad or subway system or other modern means of transport represents a great advance over previous forms of transport, but the productivity of the transport worker thereafter does not increase very significantly year by year, unlike that of the majority of industrial workers in a modern economy. If the benefits of continually increased productivity are restricted to those employed in sectors where such increases take place, then the transport workers are likely to engage in strikes — which they frequently do — to obtain comparable increases in their income, with resulting fare increases and inflationary consequences. The end result of this and similar developments in other sectors may be a lowering of the standard of living of those who do not provide required services, such as pensioners on fixed income, or who for other reasons have no means of increasing their income by withholding their services.

The very process of development thus throws up highly complex issues regarding the ways in which the increments in wealth from increased production should be distributed — not only questions of profits and investment versus wages and consumption, but also questions of how the increments available for higher personal incomes should be distributed among the different categories of the population.

The definition of balanced development

As indicated above, the concept of balanced development clearly means, for most people who use the expression, an appropriate relation between economic and social factors — giving to each field or sector of development the attention that it deserves in the total complex. It thus implies in the first instance a value or goal, something to be sought (even if but dimly perceived). The preceding pages have considered ways in which questions of balanced development arise out of the inter-actions and inter-dependencies of economic and social factors — out of the consequences or effects of economic and social factors upon each other, the mutual prerequisites or requirements which must be taken into account and the implications of differential rates of growth. Yet consideration of these inter-actions and inter-dependencies between economic and social factors even if based on the most precise knowledge will not fully indicate what the

pattern of development ought to be, because questions of value also come in — the value to be placed upon, say, education for its own sake, or upon promised future wealth versus present consumption.

Any idea of balance as meaning the attachment of equal importance to each and every economic and social field or programme, as by allocation of equal funds to each field or programme, is manifestly out of the question. Also out of the question is the idea of doing something about every economic and social problem at the same time; this would be contrary to the principle of timing and staging development, and would as well be impossibly expensive — although it is essential to *consider* simultaneously all the factors involved, even though they cannot all be *acted* on simultaneously.[49]

There are at present no quantitative criteria derivable from theoretical, logical or mathematical analysis by which the amount of attention to be devoted to a particular field of social development can be indicated. Ideally, one should be able to take a given field, such as education, health, housing, labour or family welfare, and analyse the benefits for the total developmental effort of a given allocation of expenditure in this field at a given time — that is, not only the benefits accruing in the field in question, but also the benefits (and any disadvantages) accruing in other fields, thereby getting a picture of the total of the allocation. Balanced development could then mean the combination of economic and social factors yielding the greatest sustained increase in total development. This ideal is impossible to achieve, at least at present, not only because the influences of different factors upon each other are but poorly known, as emphasized above, but also because there is no common mathematical measure of economic and social development, no way of equating economic and social values in order to add them up on a common scale. A drop in morbidity or mortality rates cannot be given an economic or monetary equivalent, just as an expansion of industrial output cannot be said to be equal to so much of a drop in morbidity or mortality rates. This is the fundamental difficulty that prevents the systematic weighting of economic and social factors in development. Even if it were possible to determine the exact effects of, say, an improvement of public health upon production of goods and services, it would be impossible to add the value obtained from such an effect to the value obtained from improvement in health as an end in itself. Certainly the economic value cannot be the sole criterion for investment in health.

The closest approach to a comprehensive measure of economic and social development is the per capita national income. Economically, this is an aggregate index, a "macro-economic" indicator which converts economic values in different sectors (industry, agriculture, commerce, services, etc.) into a single index, namely, monetary value, and thereby permits an adding up of figures from these sectors into a total national figure. While per capita national income is an aggregate concept from an economic point of view and does cover much of the field of consumption, it is generally agreed that it is not an adequate aggregate from a social point of view, and cannot be regarded as a satisfactory comprehensive measure of human welfare. The reasons for this have been stated in detail elsewhere.[50] Per capita income indicates the production and marketing costs of goods and services produced and used in a country, but not necessarily the social value of these goods and services nor — particularly in view of maldistribution of income — the welfare status of the masses of individuals in the country. (This will be made evident in chapter III.) There is a high but by no means perfect correlation. One illustration that has been given of the shortcomings of the per capita national income as a social measure is the fact that, when a calf is born in a community, the national capital goes up, but when a child is born the per capita income goes down (except in the hypothetical case that the child is sold as a slave, in which case the society would be judged richer by the per capita national income index).

The standard of living of a population — or, better, the "level of living" — must be regarded as a set of components (health, nutrition, education, housing, employment conditions, etc.) which cannot be reduced to a single index. In so far as the level of living is measurable, it must be expressed, not as a single quantity, but as a pattern of non-convertible quantities. The fact that the level of living is not to be defined as per capita national income does not deny, however, the underlying importance of growth of national income for the improvement of welfare.

It follows from the above that it is impossible to say on any systematic grounds what a country's level in health, education, or other social component should be, given its level of economic development; or again, what percentage of its national income it should expend in these fields. If an economically under-developed country is only one-third literate and has only one-third of its children in school, there is no standard which will demonstrate that, say, one-half of the people should be literate and one-half of the children in school. Obviously, everyone should be literate and all children should be in school.

In spite of these theoretical difficulties, decisions on balanced development have to be made and are made as a practical necessity all the time. Each allocation of resources in the normal budget or in a developmental budget is justified on the assumption that it contributes to the economic and social pattern that is optimal for the country — although, in practice, for the very reason of lack of a systematic framework, interests other than the welfare of the nation come into play. If countries have a long historical experience in development and a familiarity with the inter-actions of economic and social factors, plus an educated population aware of its needs and articulate about its values, and a leadership skilled

[49] H. W. Singer, "Introductory Statement on Items 4, 5, 6 and 7", paper for the ECAFE Working Party on Economic Development and Planning, Fifth Session, 15-26 September 1959.

[50] See *Preliminary Report on the World Social Situation* (United Nations publication, Sales No.: 52.IV.11), pp. 129-135; and *International Definition and Measurement of Standards and Levels of Living* (United Nations publication, Sales No.: 54.IV.5), pp. 49-52.

in the analysis of alternative proposals, then the process of legislative debate and political decision may well be adequate to deal with questions of balanced development. But many less developed countries have no such historical experience to guide them, and large parts of their populations are inarticulate and unaware of the advantages of education, the possibilities of improved health, the need for better sanitation and housing (or, alternatively, they may be in a phase of demanding much more than can possibly be provided). In these circumstances Governments have been interested in finding guidance in the experiences of other countries.

While it is theoretically not possible to state what levels of development in the various social components *should* go with given levels of economic development, it is quite possible to state what social levels *do* go with given economic levels — that is, to examine the patterns of development from a purely empirical point of view. It is conceivable that, in the light of some ideal model, the majority of the countries of the world would turn out to be unbalanced in the emphases they give to the different social and economic fields. Certainly there are regional differences and differences along political lines. What is appropriate for one country will not necessarily be appropriate for another. But after these cautions have been expressed and emphasized, the judgment can still be maintained that knowledge of the experiences and practices of other countries in regard to the interrelationship of economic and social development can be a useful type of information, particularly for those who must make practical decisions in countries that lack experience in development. Furthermore, the wider the range of experiences that can be examined, the better. The empirical study of actual patterns of development can assist the practical process of decision-making in two ways :

(1) by providing evidence of social levels that can demonstrably be achieved at given levels of economic development by countries that are moving forward in their total growth;

(2) by providing evidence of imbalances, based on the empirical criterion that countries have themselves concluded that their socio-economic pattern has been wrong (owing to over- or under-investment in certain social components) and has required revision. From an empirical point of view, it is not possible to define balance, but it may be possible to define gross imbalance (just as it is not possible to define and measure health empirically other than as the absence of illness; similarly, the concept of " balanced diet " has been developed on the basis of the known negative consequences of an unbalanced diet).

The question of balance can be examined at two levels of analysis, which it is important to distinguish. There is, in the first place, balance at the level of governmental action and public expenditure ; it includes the question of allocations to the different types of projects, allocations in both development and regular budgets and both capital and current expenditures. There is, in the second place, the question of balance among the actual factors of economic and social development, that is, in the pattern of existing interrelationships among health conditions, education (of various types), industrialization, agricultural production, etc. Imbalance at the first level might be represented by insufficient allocation to technical education in a development plan; at the second level by an insufficient number of technicians to meet existing demand. There is a close relation between the pattern of programming or of budgetary allocation and the pattern of actual development, but not necessarily correspondence. Thus, a country may make a consistently large allocation in a particular sector, and this may account for its relatively high level of achievement in this sector; or it may make a large budgetary allocation precisely because it recognizes that it is lagging in this particular sector. Investment in the private sector can play a critical role. The budgetary problem of balance cannot therefore be considered meaningfully in abstraction from the actual situation obtaining within a country.

The present report includes a chapter on the actual patterns of development in different countries (chapter III), followed by a chapter (chapter IV) reviewing date on budgetary and other expenditure allocation. Both of these chapters are exploratory and necessarily tentative in nature because of inadequacy or incomparability of date. Chapter V undertakes an analysis of the practices followed by countries in their efforts to integrate economic and social development. Finally, a series of case studies is appended, which attempts to give a comprehensive picture of the experiences and policies of a number of individual countries in regard to the question of balanced and integrated social and economic development.

Chapter III

SOCIAL-ECONOMIC PATTERNS

Introduction

The aim of the present chapter is to examine social and economic interrelationships and patterns of growth as these exist today in different parts of the world. At the outset a choice has to be made whether to approach the question from a quantitative point of view by isolating a limited number of measurable economic and social factors or to follow a more descriptive approach. The first approach has been chosen in full realization of its limitations, especially with the incomplete data now available, but in the hope that such an exploration may nevertheless contribute towards establishing the more systematic framework which is needed for the analysis of questions of balanced development of individual countries.

The social indicators mentioned in this chapter refer to actual " levels of living ", particularly in the fields of education, health, nutrition and housing and other important aspects of human welfare. Social expenditure patterns, social programmes and social institutions are considered elsewhere in the present report. The central theme of this chapter is the relationship between levels of economic development, as measured by per capita national income and other economic indices, and levels of social development, as measured by various indices of levels of living.[1]

The chapter falls into three sections. In the first section, the over-all quantitative relationships between selected economic and social indicators are reviewed on a world-wide basis, as far as this can be done with the available data. Some historical comparisons and contrasts are noted. Following this, a more detailed analysis is made of the grouping of countries and of the patterns of development in individual countries, as measured by the following four key indicators: per capita national income; per capita consumption of energy; infant mortality rate; and school enrolment ratio. Some regional differences are noted. The third section discusses briefly the internal distribution of income and welfare. It has become clear as the work on this chapter has proceeded that this final section is not an isolated discussion but is closely related to the over-all social-economic patterns discussed in the first two sections and provides a key to major differences.

It must be emphasized that the following analysis is tentative and experimental, that it touches briefly on questions that demand much fuller treatment, and that patterns rather than growth have been emphasized. In some countries, patterns of development have changed in the last few years, and the statistical facts, while relatively recent, do not give an accurate reflection of 1961 patterns (in practically no country, of course, do they reflect 1961 levels of development). In a number of countries, the statistical facts are not really facts, but estimates or very crude approximations of the facts — and must so remain until better statistical facilities become available.

Quantitative interrelations between economic and social factors of development

An over-all picture of the interrelated web of economic and social factors is given in table 1. Seventy-four countries and territories are grouped by level of per capita national income and the group averages (unweighted by size of population) are given for twelve economic and social indicators.[2]

Per capita national income and per capita energy consumption have been selected as the two " economic indicators " and are intended to reflect — with all the qualifications noted later — the value of total goods and services available and the level of industrialization in a given country. Although these two indicators are very closely related they are by no means identical, and the variations between them appear to be significantly related to variations in education levels and other social indicators.

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[1] The approach to the measurement of levels of living follows that taken in the report on *International Definition and Measurement of Standards and Levels of Living* (United Nations publication, Sales No.: 54.IV.5) and the current progress report (E/CN.5/353). It should be noted that the index " per capita national income " is an economic production index, not an income index in the sense of income received for personal consumption.

[2] Data are not available for all countries under all indicators. See notes to table 1, where the exceptions are stated.

Table 1. — AVERAGE LEVELS UNDER SELECTED ECONOMIC AND SOCIAL INDICATORS OF COUNTRIES GROUPED BY NATIONAL INCOME

Per capita national income (N.I.)	*Per capita national income (1956-58 average in US$)*	*Per capita energy consumption in kilogrammes of coal equivalent (1956-58 average)*	*Expectation of life (1955-58 average)*	*Infant mortality rate (1955-58 average)*	*Number of inhabitants per physician (latest year reported)*	*Percentage of population literate; 15 years and over (estimated circa 1950)*	*School enrolment ratio (latest year reported)*	*Per capita calorie consumption (latest year reported)*	*Starchy staples as percentage of total calories consumed*	*Percentage of male labour force in agriculture (estimated mid-1956)*	*Level of urbanization around 1955*	*Percentage of national income originating in agriculture (latest year)*
	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
Group I												
Per capita N.I. of $1,000 and over	1,366	3,900	70.6	24.9	885	98	91	3,153	45	17	43	11.4
Group II												
Per capita N.I. of $575-1,000 ...	760	2,710	67.7	41.9	944	94	84	2,944	53	21	39	10.9
Group III												
Per capita N.I. of $350-575	431	1,861	65.4	56.8	1,724	81	75	2,920	60	35	35	15.3
Group IV												
Per capita N.I. of $200-350	269	536	57.4	97.2	3,132	70	60	2,510	74	53	26	29.9
Group. V												
Per capita N.I. of $100-200	161	265	50.0	131.1	5,185	51	48	2,240	70	64	14	33.4
Group VI												
Per capita N.I. of under $100 ..	72	114	41.7	180.0	13,450	29	37	2,070	77	74	9	40.8

1. Data from the United Nations Statistical Office. See notes to table 5.

2. *World Energy Supplies, 1955-1958*, United Nations publication, Sales No.: 59.XVII.7. See notes to table 5.

3, 4. Data provided by United Nations Population Branch, Bureau of Social Affairs. On infant mortality rates see notes to table 5.

5. WHO, *Annual Epidemiological and Vital Statistics*, 1960.

6. *Report on the World Social Situation*, United Nations publication, Sales No.: 57.IV.3.

7. School enrolments (excluding pre-primary and higher education) for the latest year reported in the *Statistical Yearbook 1959*, United Nations publication, Sales No.: 59.XVII.1 (usually for one of the three years 1956-58) as a percentage of four-fifths of the 5-19 age group. See notes to table 5.

8, 9. *FAO Production Yearbook 1959.* Data available for only forty countries.

10. Estimated by the United Nations Population Branch, Bureau of Social Affairs. Data available for only forty-nine countries.

11. Estimated by the United Nations Bureau of Social Affairs from data in International Urban Research, *The World's Metropolitan Areas* (Berkeley and Los Angeles, University of California Press, 1959) which includes a list of the world's metropolitan areas of more than 100,000 inhabitants.

12. United Nations, *Statistical Yearbook 1959.* Data available for only forty-two countries.

The "social" indicators are selected from those recommended in the progress report on "International Definition and Measurement of Levels of Living",[3] and have already been used widely in the two earlier *Reports on the World Social Situation* for reporting trends in the fields of health, education and nutrition. Ideally, the indicators selected should cover all the components of levels of living. Only three components are in fact covered in table 1 — health, education and nutrition. The most important omissions are housing, and such components as social security, clothing and recreation, which cannot easily be expressed quantitatively on a worldwide scale.

Three additional indicators are included in table 1, which reflect aspects of the social and economic structure that are closely related to levels of income and welfare. These are: the percentage of the male labour force working in agriculture; and the related figure on percentage of national income originating in agriculture; and the level of urbanization.

A large percentage of all the figures in the analysis that follows should be treated with a certain suspicion and circumspection. The main criticism of the following pages might well be that too much has been built on such inadequate foundation stones. However, to limit the analysis to the small number of countries for which data

[3] Op. cit. It must be recognized that the indicators used — for example, infant mortality rate (inverse) as an indicator of health, school enrolment ratio as an indicator of education — are not necessarily the best indicators of the components in question. Life expectation is another indicator of health which would not necessarily give the same results. It has been necessary to use indicators for which data are available.

are known to be reliable would preclude any over-all view (which is a useful corrective to the analysis of selected countries) and would exclude the great majority of less developed countries. As it is, a large number of countries and territories at the lower end of the national income scale, particularly in Africa, have been excluded, mainly because of the inadequacy of the demographic statistics. It therefore seemed better not to restrict the number of countries examined, but to keep the analysis as simple as possible. It must be emphasized that, if the analysis should be expanded on any future occasion, revisions in the underlying figures, particularly as new data from the current round of censuses become available, are likely to change the picture substantially.

With these qualifications, table 1 presents an over-all picture of the average levels under selected economic and social indicators of countries grouped by per capita national income. The relation between the economic and social indicators and between the levels of living and the associated structural changes reflected in the last three columns is evident from the table and does not need to be elaborated further. The only exceptions to a systematic correspondence are group I under percentage of national income originating in agriculture, which shows a rise at the top income level due to the number of high income group countries with relatively large and productive agricultural sectors, and group V under starchy staples as percentage of total calories consumed, which is no doubt affected by the small number of countries having data on this indicator.

Correlation between indicators

If, instead of looking at the group averages, countries are ranked under the different indicators, mathematical measures of correlation can be used to throw further light on the closeness of the relation between these indicators. The co-efficients of rank correlation between different indicators are given in the next column.

These measures confirm, for example, the very close relation between the two economic indicators, per capita national income and energy consumption. The variations are also of interest. Countries ranking substantially higher in national income than in energy include "high-income" countries such as New Zealand, where agriculture makes an important contribution to national income, and also countries at a lower income level which are heavily dependent on an agricultural export crop, such as the Federation of Malaya, Costa Rica and El Salvador.[4] Countries ranking substantially higher in energy consumption than per capita national income include all the centrally planned economies of eastern Europe; differences in national accounting methods and problems of exchange rate both contribute to the difficulty of estimating comparable per capita national income figures for these countries, so that it is not clear to what extent the relatively higher energy consumption level of these countries, in relation to the per capita income level, is a reflection of statistical difficulties in comparing national incomes. Apart from this group, others which rank notably higher in energy are countries with important mining sectors, such as, for example, the Union of South Africa, Peru, Bolivia and also Japan and China (Taiwan).

COEFFICIENTS OF RANK CORRELATION [a]

Per capita national income and energy consumption	0.90
Per capita national income and infant mortality [b]	—0.84
Per capita national income and school enrolment	0.84
Per capita national income and calorie consumption	0.80
Per capita national income and starchy staples [b]	—0.86
Energy consumption and infant mortality [b]	—0.69
Energy consumption and school enrolment	0.76
Urbanization and infant mortality [b]	—0.69
Urbanization and school enrolment	0.71
Urbanization and starchy staples [b]	—0.66
Urbanization and caloric consumption	0.69
Infant mortality and school enrolment [b]	—0.67
Infant mortality and number of inhabitants per physician	0.43
Infant mortality and calorie consumption [b]	—0.81
Literacy and school enrolment.....	0.78
Male labour force in agriculture and infant mortality ...	0.86
Male labour force in agriculture and energy consumption	—0.89
Male labour force in agriculture and school enrolment [b] .	—0.81

[a] It should be noted that the number of countries included in each calculation is not identical. Where the correlation includes infant mortality, only countries with data officially reported as complete are included. It might be expected that, if the countries with estimated infant mortality rates were included, the correlation with per capita national income would be less close. In fact, it is slightly closer (0.87 instead of 0.84). The same situation is found with correlations of infant mortality with energy consumption and school enrolment. On the other hand, an examination of some twenty low-income countries, mainly in Africa, which fall outside table 1 altogether shows a correlation between per capita energy consumption and school enrolment ratio of only 0.20. It is quite possible that the correlations would show substantial differences if countries were selected from different income ranges, or from different regions.

[b] Infant mortality rates, number of inhabitants per physician, starchy staples as per cent of total calories and percentage of male labour force in agriculture involve negative correlations — except where they are correlated with each other — since they are inverse measures of development in the sectors concerned (e.g., the infant mortality rate is an inverse measure of health). Where correlations of the infant mortality rate or of other of these rates are discussed in the text, it will be understood that the inverse of the measure in question is meant.

The most important social indicators — infant mortality, school enrolment ratio and calorie consumption — are all more closely related to per capita national income than to either energy consumption of level of urbanization, and they are all more closely related to the economic indicators than to each other. The only exception is the close relation between infant mortality rate and calorie consumption. On the other hand, infant mortality shows a low correlation with the number of physicians; this indicates that the availability of health services, which depends on the distribution and organization of medical services, is a more important factor than the absolute number of physicians.

[4] There is an obvious need in this analysis for a third economic indicator which would reflect the level of agricultural productivity. Some social indicators would quite likely be more closely correlated with such an indicator than with an indicator reflecting the level of industrialization.

Grouping of countries by levels of economic and social development

The purpose of this section is to group countries under selected indicators, and attempt to determine what levels of social development tend to correspond empirically with given levels of economic development; from this it will be possible to proceed to a consideration of the patterns of economic and social development of the individual countries. A country, for example, might fall, as far as national income is concerned, in a middle range position but be higher or lower than other countries of the same income level in energy consumption, health, education or other indicators. It must be emphasized that this approach will be based on empirical correspondences — on analysis of what levels of social development do go with given levels of economic development, not on what the correspondences ought to be.

A first limitation in attempting such an approach is the lack of sufficient reliable data under some indicators. Data on calorie consumption and on percentage of the male labour force in agriculture, for example, are available for a smaller number of countries than data on other indicators. The analysis is therefore limited to four only of the indicators included in table 1 — per capita national income, per capita energy consumption, infant mortality rate (inverse) and school enrolment ratio.

The main difficulty, however, lies in the method of determining corresponding groups. It was decided to break up income figures into six groups, from high to low, and to obtain six corresponding groups for the other three indicators. A considerable amount of arbitrary choice is necessarily involved in setting the group limits.[5] The method finally used after some experimentation was to choose six national income groups that appeared to fit the data, resulting in something approaching a geometric rate of increase under this indicator. The group limits under the other three indicators were then fixed by first taking the six national income groups and determining the average score of the countries in each group under each of the other three indicators; the countries that deviated from the average beyond certain confidence limits were then redistributed, and finally group limits for these three indicators were revised on the basis of the new distributions of scores.[6]

The groups limits established in this way are given in table 2 and the distribution of countries by groups under all four indicators can be found in table 5 at the end of this section.

Table 2. — Group limits [a]

Group	*National income*	*Energy consumption*	*Infant mortality rate*	*School enrolment ratio*
I ...	Above 1,000	Above 3,150	Below 28	Above 92
II ...	575-1,000	1,675-3,150	28-44	81-92
III ...	350-575	800-1,675	44-65	69-81
IV ...	200-350	350-800	65-100	54-69
V ...	100-200	120-350	100-160	38-54
VI ...	Below 100	Below 120	Above 160	Below 38

[a] Countries falling exactly on the border have been included in the higher group.

The most interesting point which emerges from this initial grouping (and which shows up most clearly in the fitted curves shown on chart I joining the group limits under each of the indicators) is the contrasting behaviour of the economic and social indicators.

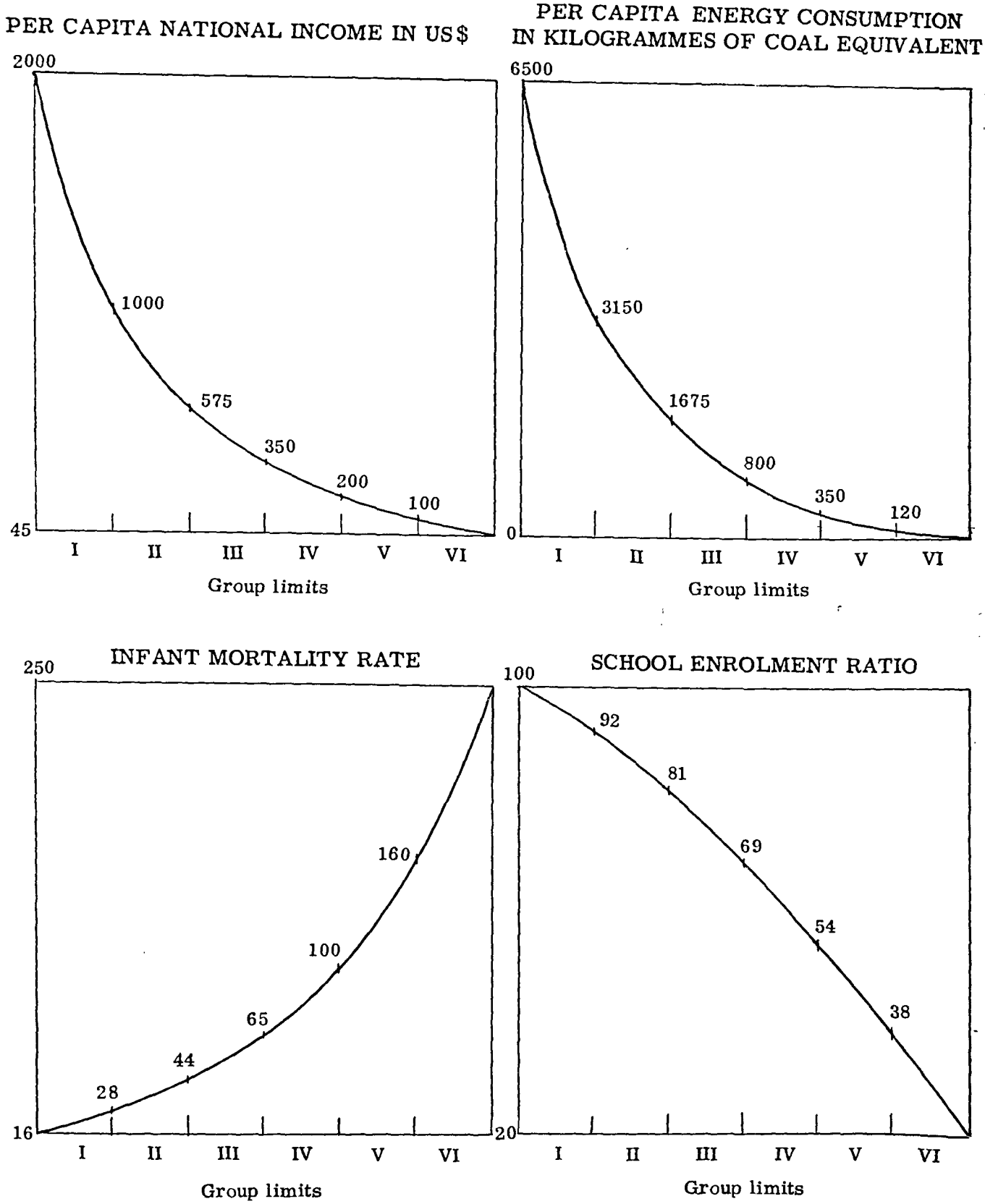
The increases in per capita national income are relatively small in the lower three groups but grow at a greatly accelerated rate in the top three groups. Energy consumption behaves in the same way. The infant mortality rate (or more accurately, its inverse) changes in the opposite direction — by relatively large steps at the bottom and small steps at the top. The school enrolment figures are closer to a straight line, but still change somewhat more rapidly in the lower three groups and reach a ceiling of 100 per cent in the top group. It can be seen from table 1 that life expectancy behaves much the same way as infant mortality. Literacy rates "bunch" heavily at the top, as do figures on per capita calorie consumption. These differences suggest that, *as measured by these indicators*, the rate of economic development is proportionately greater at the higher levels, while the rate of social development — particularly health — is greater at the lower levels. Thus, it is easier for the high-income countries to expand their industry than to lower their mortality ratio, whereas, comparatively speaking, the opposite is true of the low-income countries. This follows in part from the nature of the indicators; at the very top, there is an obvious and necessary limit on the social indicators used — infant mortality rates are limited by scientific knowledge and school enrolment is automatically limited (as is literacy) by its very nature. If higher education were included, for example, in the enrolment ratio, or if an indicator measuring the quality of education could be included, it would probably substantially change the curve shown in chart I.

There is a suggestion in the data of a break somewhere between the top three and bottom three groups, around the $300-$350 level — a natural watershed above which the economic indicators advance rapidly, and the health and education indicators start to move more slowly towards their ceiling. Possibly this may represent a critical area in other respects and that it may be associated as cause or effect with other changes, such as the secular fall in the birth rate, or — as will be suggested later in the chapter — with changes in the pattern of the economy by which the lagging and traditional sectors are brought increasingly into the modern sector.

[5] For each indicator a scale of equal class limits can be chosen, or the groups might each include an equal number of countries, or the scale could follow any natural grouping which appeared in the figures, or again a different scale could be used under each indicator. The choice immediately affects the subsequent analysis since the relative group position of some countries would be changed, although any pronounced variation in pattern is likely to remain the same under any reasonable method of grouping.

[6] The limits were established in such a way that, for a given confidence coefficient, the confidence intervals for the means of neighbouring groups would not overlap. Three-sigma rule was generally followed. Minor adjustments were subsequently made in the class limits to make these correspond to a fitted curve (chart I).

Chart I


PER CAPITA NATIONAL INCOME IN US$
2000
1000
575
350
200
100
45
I
II
III
IV
V
VI
Group limits
PER CAPITA ENERGY CONSUMPTION IN KILOGRAMMES OF COAL EQUIVALENT
6500
3150
1675
800
350
120
0
I
II
III
IV
V
VI
Group limits
INFANT MORTALITY RATE
250
160
100
65
44
28
16
I
II
III
IV
V
VI
Group limits
SCHOOL ENROLMENT RATIO
100
92
81
69
54
38
20
I
II
III
IV
V
VI
Group limits

Quite apart from such speculations, the differing economic and social patterns which emerge from the grouping hold some policy implications and some implications of wider interest. The "bunching up" of the social indicators discussed here means that, for some of the countries even in the third group under national income, expectation of life is already more than 65 years, the infant mortality rate has dropped below 50 per 1,000, more than 90 per cent of the population 15 years and over is literate and over 75 per cent of the 12-year school population is enrolled in school. This does not mean that countries in the top half of the scale, and particularly in the first two groups, are not faced with very great social problems resulting from their own multiplying technological revolution, but these problems are different in kind from the problems of those countries trying to break through the initial barriers of development and provide their citizens with certain minimum levels of living.

Another implication of the analysis bears on the argument that the gap between the high-income and low-income countries is continually widening. The data show that this widening gap in income terms is not automatically translated into welfare terms, at least in so far as welfare can be measured by the indicators selected here.

Trends over time

The differential rates of growth of the economic and social indicators implied by this cross-sectional picture might be expected to bear some resemblance to recent trends in growth, but not necessarily to trends over a longer historical period. The most superficial examination of historical data for the currently well developed industrialized countries suggests that, in fact, a very different pattern prevailed during the earlier period of their industrialization from that of the currently less developed countries.

Infant mortality rates, for example, were higher (that is, health levels were lower). In such industrialized European countries as the United Kingdom, Denmark, France and the Netherlands, these rates fluctuated between 200 and 100 during the nineteenth century (see table 3), even though these countries were probably more developed at that time than the majority of countries in the lower three income ranges at the present time.[7] During the nineteenth century, infant mortality rates were higher in the more industrialized countries, England and Wales and the Netherlands, than in Denmark and Sweden (not shown in table 3) and remained stable or possibly even rose in the first half of the nineteenth century under the impact of widespread industrialization, the reverse of the present relation. This was associated with a higher rate of infant mortality in the towns than in the country, again reversing the present position where infant mortality is negatively related to the level of urbanization. In most of the industrialized western European countries, the downturn began only at the end of the nineteenth century and has been greatly accelerated during the last fifty years.

Table 3. — INFANT MORTALITY RATES IN SELECTED COUNTRIES

Year	England and Wales	Denmark	France	Netherlands	United States of America	Japan
1826	—	—	163	—	—	—
1851-55	156	134	166	190	—	—
1871-75	153	137	178	210	—	—
1891-95	150	139	170	165	—	—
1901-1905 ..	138	119	139	136	—	—
1915-19	97	92.0	131.8	87.1	95.7	172.6
1925-29	70.9	82.2	91.4	57.9	69.0	140.8
1935-39	55.3	64.2	66.1	37.4	53.2	110.4
1945-59	39.4	41.2	67.8	40.4	33.3	66.9

Source: Statistique internationale du mouvement de la population, République française, Ministère du travail et de la prévoyance sociale (Paris, 1907), p. 463 (for figures before 1905).

Foetal, Infant and Early Childhood Mortality, Vol. I, The Statistics (United Nations publication, Sales No. 54.IV.7).

[7] Judging by estimates of national product and percentage of labour force in agriculture. See Simon Kuznets, "Quantitative Aspects of the Economic Growth of Nations — I: Levels and Variability of Rates of Growth", *Economic Development and Cultural Change* (Chicago), vol. V, No. 1, October 1956, pp. 24-25. Professor Kuznets explores here and in other writings the question of the relative levels of the now advanced countries at the beginning of industrialization and the currently under-developed countries. Taking into account the rates of growth of the now advanced countries since around 1850, he comes to the tentative conclusion that the current per capita levels in the under-developed countries, and even in Latin America, are significantly below those in western European countries before their industrialization.

NOTE TO CHART I

The curves are based on the group limits. The upper limits of group I and the lower limits of group VI (particularly the last) were fixed tentatively in order to "anchor" the ends of the scale and they represent a compromise between different methods which could have been used. The scale could have started at 0 for national income and school enrolments and some equivalent figure, say 500, for infant mortality. But, since some twenty or more countries at the lower end of the scale are excluded for lack of data, there is no theoretical reason why there should not be at least one more group below group VI. Another possibility would be to chart the lowest values in the data used, which were: national income 46, infant mortality (inverse) 263 and school enrolment 22. A third choice was simply to fix the lower limit at four standard deviations of group VI, which would bring the lower limits to 50, 225 and 23 respectively. A fourth possibility, and this was the method used, was to project the curves in the graph, taking into account the limits suggested by the second and third choices, and, in view of the general uncertainty about what happens in this area, to round off the limits to avoid the appearance of spurious precision. The same procedure was used to fix the upper limits. The upper limits to group I and the lower limits to group VI obtained in this way are:

	Per capita national income	*Per capita energy consumption*	*Infant mortality rate*	*School enrolmen ratio*
Upper limit to group I.....	(2,000)	(6,500)	(16)	(100)
Lower limit to group VI	(45)	(0)	(250)	(20)

It is less easy to suggest historical trends in the case of literacy and school enrolments because of the lack of comparability of the data, but studies made by UNESCO [8] on the relation between educational levels on the one hand and national income and level of industrialization on the other hand show that countries have varied considerably in their relative timing of literacy and of industrialization. In England and Belgium, both countries where there was an early industrial and commercial development, a high level of school enrolment was not reached until the second half of the nineteenth century, although in both countries an educated class had long existed. In Germany, on the other hand, where an effective system of compulsory education had been introduced (in Prussia) as early as 1791, high educational levels preceded the rapid industrialization which took place in the second half of the nineteenth century. The Scandinavian countries show a remarkably high level of school enrolments in the nineteenth century at a time when they were comparatively little industrialized. In Norway and Sweden, for example, as early as 1875 more than 80 per cent of children aged seven to fourteen were attending school.[9] The United States of America also had the benefit of a literate population before the period of rapid industrialization in the second half of the nineteenth century. In 1870, 80 per cent of the population was literate, although at that time more than half of the labour force was still employed in agriculture (see table 4). Data for the USSR indicate that mass literacy was attained during the period of rapid industrialization under the first three five-year plans, when the literacy rate (of the 9 to 49 age group) increased from 56.6 per cent (1926 census) to 89.1 per cent (1939 census).

Table 4. — Literacy rates in selected countries [a]

Belgium	*France*	*United States of America*	*USSR* [b]
1866...59	1872...77	1870...80	1897...26.3
1880...69	1881...—	1880...83	1926...56.6
1890...74	1891...—	1890...87	1939...89.1
1900...81	1901...83	1900...89	1959...98.5
1910...97	1911...88	1910...92	
1920...92	1921...92	1920...94	
1930...94	1931...95	1930...96	
1947...96	1936...96	1940...96	
	1946...97	1950...97	

[a] Taken from UNESCO, *World Illiteracy at Mid-century*; figures expressed as literacy rates rather than illiteracy.

[b] The rates refer to literacy in the age group 9 to 49 years. Figures are from *Uroven'obrazovaniya natsional'nyi sostav vozrastnaya struktura i razmeshcheniye naseleniya SSSR po respublikam, krayam i oblastiam* (Level of education, national composition, age structure and distribution of population of the USSR by republics, regions and districts). Ts.S.U., Moscow 1960, p. 8.

[8] *World Illiteracy at Mid-Century* (1957), chapters VIII, IX and X.

[9] *Ibid.*, pp. 173, 185.

Thus, while the now developed countries were considerably worse off in health when they were at an early stage of industrial growth, compared with less developed countries today at a similar income level, it seems that for at least some of the now developed countries, levels of literacy and school enrolments were substantially higher than the present levels in the majority of the less developed countries. This is partly understandable from the fact that, with the help of modern medical technique developed elsewhere, health can be improved very rapidly in the lower income level countries today, as noted above, causing rapid increase of the school-age population, which, however, makes it more difficult to achieve education advance. A much closer study needs to be made of relative rates of growth of educational enrolments and national income before any conclusion about the interaction between the two can be reached.

Analysis of patterns of economic and social development of individual countries

In table 5 countries are grouped under per capita national income; per capita energy consumption; infant mortality rate; and school enrolment ratio. It should again be emphasized that the grouping is based on empirical data; to say that a country is in a higher or lower group under a social indicator than under an economic indicator — in particular, per capita national income — means simply that it is in a higher or lower group than might be expected from an examination of other countries within the same per capita national income group.

With this qualification in mind, some idea of the extent to which individual countries vary as between per capita national income and school enrolment ratio groups and as between per capita national income and infant mortality groups, can be obtained from tables 6 and 7.

It is clear from these tables that individual countries show considerable variation in their development profiles as defined by these indicators. In charts II-V the different patterns have been expressed graphically in the form of bar diagrams,[10] which illustrate levels under the four selected indicators: per capita national income; energy consumption per capita; infant mortality rate (used inversely as a measure of health); and school enrolment as a percentage of school-age population (as a measure of education). These particular indicators, of course, tell only part of the story and need to be interpreted in the light of the particular background — economic, social and cultural — of the countries concerned. A brief commentary, by region, on patterns found in selected countries is given in the following pages.[11]

[10] The bar diagrams are taken from the curves in chart I, and are thus based on the empirical grouping that has been used throughout this chapter.

[11] An attempt has been made to avoid using examples of countries where crude estimates of the underlying data are involved. It has also not been possible to include countries where levels are all in group VI because the scales are unreliable in this area (see note to chart I). Otherwise, an effort has been made to illustrate the different types of patterns found.

Chart II illustrates social-economic patterns found in selected Asian countries (including in this case Israel). The majority of countries in Asia, and, with the exception of Japan, those with the largest populations fall into Group VI under most indicators [12] and their relative levels in national income, energy consumption, health and education within group VI cannot be presented in diagram form on the basis of the data now available.

Some interesting variations in patterns do, however, appear in the case of the countries illustrated in chart II. Japan, for instance, provides an example of a country relatively highly industrialized (group III under energy consumption and group IV under national income) but with the social indicators considerably more advanced than the economic. The levels of infant mortality and school enrolment are both in a considerably higher group than would normally be expected from the per capita national income level (which is, however, now advancing rapidly). At the same time, Japan is more industrialized, has a larger percentage of the male labour force in industry, and is more urbanized than the majority of other countries at a corresponding income level. The transformation from a traditional economy to a modernized industrialized economy began nearly a century ago, and Japan has a long history of government investment in social services, mainly in education and health. Although as a result of recent trends Japan now has a very low birth rate together with a low death rate, the population has more than doubled since 1870; the pressure of population on limited resources, the intensive cultivation of small family holdings and the large number of small industrial enterprises involving cheap labour mean that the national income level, although high in relation to other Asian countries, is still much closer to the low Asian average than to that of Europe.

A very different pattern is found in the Philippines and Thailand. In both countries the educational enrolment ratio is relatively advanced, but the levels of industrialization and of health are relatively low. The Philippines, for example, which is high up in group IV under education, falls into group V under per capita national income and energy consumption and in group VI under infant mortality rate (estimated). In

[12] The distribution of countries under national income groups is as follows: Group I; Group II, 1 (Israel); Group III; Group IV, 3; Group V, 2; Group VI, 8.

NOTES TO TABLE 5 *(See following page)*

Per capita national income in $ US: average for 1956-58

Allowance has to be made for a wide margin of error in the national income estimates. In particular, the conversion of national currencies into US dollars raises major problems. In many cases a single official exchange rate is not available. Even if such a rate is available, this may not reflect relative real incomes within countries. Studies of relative internal purchasing power of different national currencies have shown that considerable bias may be caused by pricing European output at US prices. These difficulties may be greatly magnified when comparisons are made between developed and less developed countries where there may be no common basket of goods and services. In addition countries in the lower groups under this indicator may vary widely amongst themselves in the extent to which allowance is made for the output of the subsistence sector. (These problems were discussed in detail in chapter IX of the *Preliminary Report on the World Social Situation.*)

In the case of Eastern European countries with centrally planned economies, there are difficulties not only of conversion rates, but also of adjustments to make the figures published by these countries for "material product" (see footnote [a] to table 4, chapter 4) roughly comparable to national income figures.

It should be noted that the figures are an average for the years 1956-58. This has had the result that two countries, Thailand and Portugal, fall into lower groups in this chapter than in the analysis in chapter IV, where the national income data are for 1958 alone.

Per capita consumption of energy: average for the years 1956-58

Data from *World Energy Supplies 1955-58*, United Nations publication, Sales No.: 59.XVII.7.

The data refer only to coal, coke and lignite, petroleum and its products, natural and manufactured gas and energy. Energy consumption has been used as a convenient indicator of the degree of mechanization and industrialization, but it is by no means certain that it is in fact a better indicator of the level of industrialization than, say, per capita steel consumption, which is, however, available for fewer countries. Steel consumption is in fact more closely correlated with the social indicators. This is a point which requires further investigation.

Infant mortality rate: average for 1955-58

Infant mortality rates are notoriously incomplete in countries likely to have the highest rates of infant deaths. Estimates for countries where the official rates are reported to the Statistical Office of the United Nations to be incomplete, or where no official rate is available, are marked with an asterisk. Estimates for countries in Asia have been taken from "Population Trends and Related Problems of Economic Development in the ECAFE Region", *Economic Bulletin for Asia and the Far East*, Vol. X, No. 1, June 1959. These estimates are for the period 1954-56. Where estimates for countries in Latin America are given, these are the very rough estimates given in the 1957 *Report on the World Social Situation* and are for the period 1950-55. The data for Ghana apply to the registration area only.

It should be noted that the majority of countries are grouped according to 1955-58 averages. This means that countries with rapidly changing infant mortality rates may appear in a higher or lower group than they would if only the last year were taken. The USSR, for example, where the infant mortality rate has fallen from 60 per 1,000 in 1955 to 40.6 per 1,000 in 1958 falls in group III if an average for these years is taken, but would fall in group II, if the last year were taken.

School enrolment ratio: latest year

The school enrolment ratio has been calculated on the assumption that the normal period of primary and post-primary schooling (excluding pre-primary and higher education) covers 12 years, or four-fifths of the 5-19 age group. In those countries where census data on age distribution are not available, enrolments were calculated as a range on the assumption that an estimated 30-35 per cent of the population in these countries falls into the 5-19 group. These estimates are marked with an asterisk. In other countries where the census was taken some years ago, the margin of error is probably as great.

It should also be noted that the coverage of the enrolment figures may not be uniform. For example, in Burma and other Buddhist countries where monastic education plays a significant role, the official enrolment figures may underestimate the true position.

It should be emphasized again that the quantitative level of enrolments is very far from indicating the quality of education received. A country falling into a high group under school enrolment may in fact have a far inferior system of education to one having a lower enrolment ratio but better qualified teachers and a better distribution of pupils. A high enrolment ratio particularly in some of the less developed countries may mean a large number of children receiving a few years of primary education with little lasting value, or it may mean a smaller primary enrolment with less wastage and a limited but effective secondary school enrolment.

Table 5. — COUNTRIES GROUPED BY LEVEL OF PER CAPITA NATIONAL INCOME, PER CAPITA ENERGY

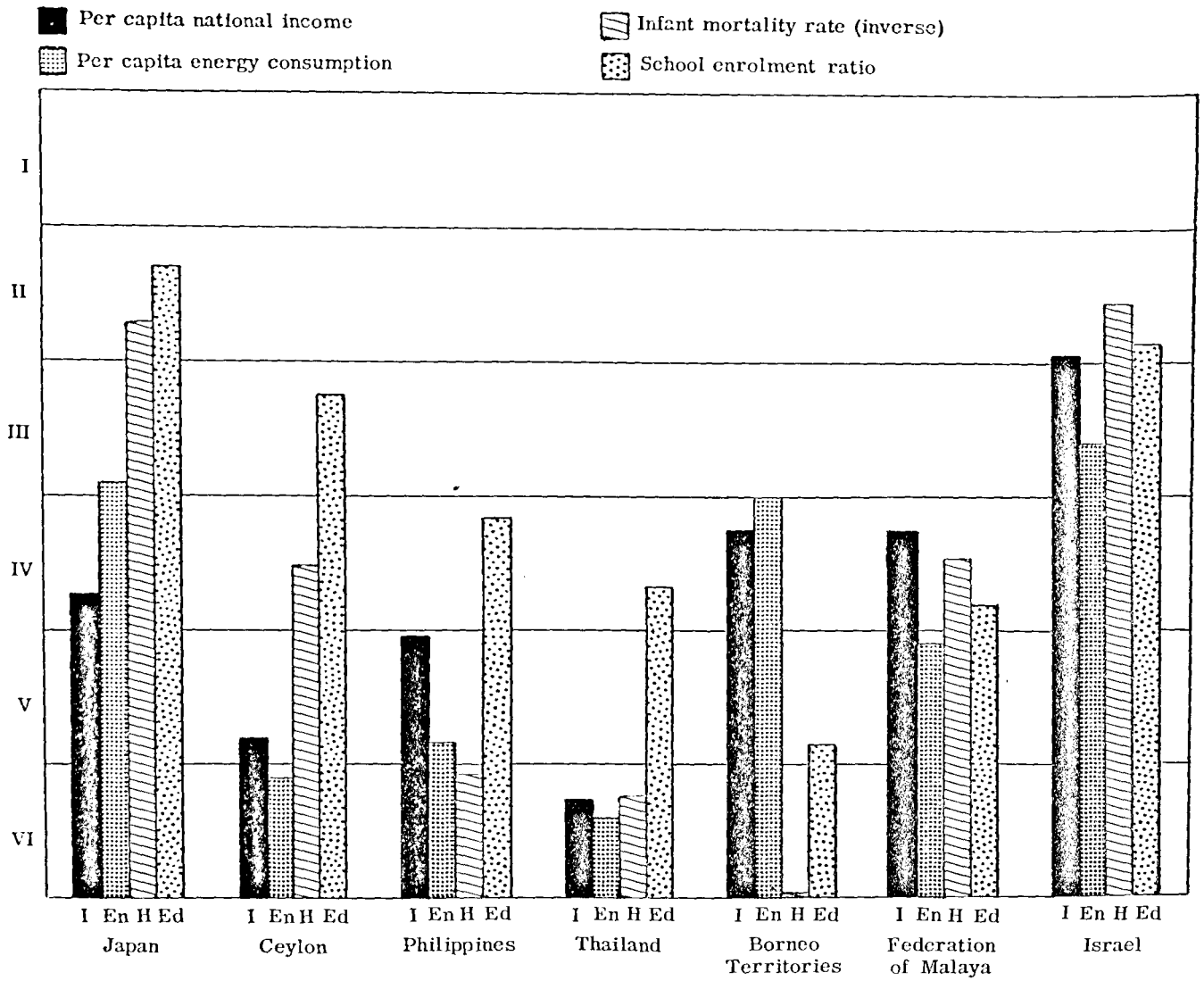
Group	*Per capita national income in $US: 1956-58 average*				*Per capita energy consumption: 1956-58 average*			
	Europe, Northern America and Oceania	*Latin America*	*Africa*	*Asia*	*Europe, Northern America and Oceania*	*Latin America*	*Africa*	*Asia*
I	Australia Canada New Zealand Sweden Switzerland United States of America				Australia Belgium Canada Czechoslovakia Germany, Federal Republic Germany, Eastern United Kingdom United States of America			
II	Belgium Czechoslovakia Denmark Finland France Germany, Federal Republic Netherlands Norway USSR United Kingdom	Venezuela		Israel	Austria Denmark France Hungary Netherlands New Zealand Norway Poland Sweden Switzerland USSR	Venezuela	Union of South Africa	
III	Austria Germany, Eastern* Hungary Ireland Italy Poland	Argentina Chile Cuba Puerto Rico Trinidad and Tobago Uruguay	Union of South Africa		Bulgaria Finland Italy Ireland Romania	Argentina Chile Cuba Puerto Rico Trinidad and Tobago		Borneo territories Israel Japan
IV	Bulgaria Greece Spain Turkey Yugoslavia	British Guiana Costa Rica Jamaica Mexico Panama		Borneo territories Malaya, Federation of Japan	Greece Spain Yugoslavia	British Guiana Colombia Jamaica Mexico Panama Uruguay		China (Taiwan)
V	Albania Portugal Romania	Brazil Colombia Dominican Republic Ecuador Honduras Nicaragua Paraguay Peru	Ghana	Ceylon Philippines	Albania Portugal Turkey	Bolivia Brazil Costa Rica Dominican Republic Ecuador Honduras Nicaragua Peru	Ghana	India Malaya, Federation of Philippines
VI		Bolivia	Belgian Congo	Burma Cambodia China (Taiwan) India Indonesia Laos Pakistan Thailand		Paraguay	Belgian Congo	Burma Cambodia Ceylon Indonesia Laos Pakistan Thailand

CONSUMPTION, INFANT MORTALITY RATE (INVERSE) AND SCHOOL ENROLMENT RATIO

Infant mortality rate (inverse): 1955-58 average				*School enrolment ratio: latest year (per cent of 12-year age group enrolled, excluding pre-primary and higher education)*				*Group*
Europe, Northern America and Oceania	*Latin America*	*Africa*	*Asia*	*Europe, Northern America and Oceania*	*Latin America*	*Africa*	*Asia*	
Australia Denmark Finland Netherlands New Zealand Norway Sweden Switzerland United Kingdom United States of America				Australia Belgium Canada France Germany, Federal Republic Ireland New Zealand United Kingdom United States of America				I
Austria Belgium Canada Czecho-slovakia France Germany, Federal Republic Greece Ireland			Israel Japan	Czecho-slovakia Finland Netherlands Norway Sweden	Puerto Rico Trinidad and Tobago		Israel Japan	II
Germany, Eastern Hungary Italty Spain USSR	Argentina Jamaica Puerto Rico Trinidad and Tobago		China (Taiwan)	Austria Bulgaria Denmark Greece Hungary Poland	Argentina* British Guiana		Ceylon	III
Albania Bulgaria Poland Portugal Romania Yugoslavia	British Guiana Costa Rica Uruguay Mexico Venezuela	Ghana	Malaya, Federation of Ceylon	Albania Germany, Eastern Italy Romania Yugoslavia	Chile Costa Rica Jamaica Mexico Panama Paraguay	Union of South Africa	China (Taiwan) Malaya, Federation of Philippines* Thailand	IV
	Bolivia * Brazil * Chile Colombia * Cuba * Dominican Republic * Ecuador * Honduras * Nicaragua * Panama * Peru *			Portugal Spain Turkey	Cuba Colombia Ecuador Peru Uruguay * Venezuela	Belgian Congo * Ghana *	Borneo territories * Cambodia	V
			Borneo territories * Burma * Cambodia * India * Indonesia * Laos * Pakistan * Philippines * Thailand *		Brazil Dominican Republic Honduras Nicaragua		Burma India Indonesia * Laos * Pakistan *	VI

Chart II

SELECTED COUNTRIES AND TERRITORIES IN ASIA



the Philippines, great emphasis has for many years been put on raising educational levels and this is reflected in the high rate of government expenditure on education. Education is considered "the core of both economic and social development" in the current Five-Year Economic and Social Development Programme covering the years 1957-61. But the Philippines economy is predominantly agricultural, with over 60 per cent of the male labour force employed in agriculture and much of the population living at a subsistence level considerably below the national average;[13] these factors, together with a lower priority given to health expenditure, are reflected in the higher infant mortality rate (estimated).

Thailand provides an example of a similar pattern, falling into the lowest group under per capita national income, energy consumption and infant mortality rate, but under group IV in education. Over 80 per cent of Thailand's male labour force is engaged in agriculture, but free elementary education is provided for virtually all its children.

Ceylon shows somewhat the same pattern, but here both health and education indicators are considerably higher than would be expected from the level of economic development.[14] Ceylon falls into group V under per capita national income, but into group IV under infant mortality and group III under school enrolments. Some 40 per cent of national income is derived from plantation agriculture producing tea, rubber and coconuts for export, and less than 10 per cent of the national income is derived from industry. In per capita energy consumption, Ceylon falls into group VI. Major advances

[13] *The Five-Year Economic and Social Development Programme for FY 1957-1961* (Philippines National Economic Council, 1957), p. 4. See footnote 32.

[14] This remains strikingly true even if allowance is made for possible under-reporting of infant mortality and over-reporting of actual school attendance.

Table 6. — Interrelationship between per capita national income and school enrolment

	Per capita national income					
School enrolments	*I*	*II*	*III*	*IV*	*V*	*VI*
I	Australia Canada New Zealand United States of America	Belgium Federal Republic of Germany France United Kingdom	Ireland			
II	Sweden	Czechoslovakia Finland Israel Netherlands Norway	Puerto Rico Trinidad and Tobago	Japan		
III		Denmark	Argentina Austria Hungary Poland	British Guiana Bulgaria Greece	Ceylon	
IV			Chile Germany, Eastern Italy Union of South Africa Uruguay	Costa Rica Federation of Malaya Jamaica Mexico Panama Yugoslavia	Albania Paraguay Philippines Romania	China (Taiwan) Thailand
V		Venezuela	Cuba	Borneo Territories Spain Turkey	Colombia Ecuador Ghana Peru Portugal	Belgian Congo Cambodia
VI					Brazil Dominican Republic Honduras Nicaragua	Bolivia Burma India Indonesia Laos Pakistan

Table 7. — INTERRELATIONSHIP BETWEEN PER CAPITA NATIONAL INCOME AND INFANT MORTALITY (INVERSE)

Infant mortality	*Per capita national income* I	II	III	IV	V	VI
I	Australia New Zealand Sweden Switzerland United States of America	Denmark Netherlands Norway United Kingdom				
II	Canada	Belgium Czechoslovakia Federal Republic of Germany Finland France Israel	Austria Ireland	Greece Japan		
III		USSR	Argentina Germany, Eastern Hungary Italy Puerto Rico Trinidad and Tobago	Jamaica Spain		China (Taiwan)
IV		Venezuela	Poland Uruguay	British Guina Bulgaria Costa Rica Federation of Malaya Mexico Yugoslavia	Albania Ceylon Portugal Romania	
V			Chile Cuba	Panama	Brazil Colombia Dominican Republic Ecuador Honduras Nicaragua Paraguay Peru	
VI				Borneo territories	Philippines	Burma Cambodia India Indonesia Laos Pakistan Thailand

have been made since 1945 in health and education. The crude death rate, for example, has been halved since 1945. Ceylon is accordingly now confronted with the problem of maintaining and strengthening these social levels in the face of a rapidly rising population and a slow-moving national income. The imbalance created by this situation and the financial difficulties involved have been publicly emphasized. The programme outlined by the National Planning Council in the recently published *Ten-Year Plan* stresses the importance of developing industry. "In order to make a sufficient impact on the employment situation in the background of a rising work-force, Ceylon will need to create a sizable industrial sector.... One of the major goals of planning would be to bring about a progressive change in this structure with industry playing an increasing role in respect of its contribution to both employment and national output."

In Thailand, the Philippines and Ceylon, as well as in many other countries, the quantitative school enrol-

ment ratio does not provide a very reliable guide to educational attainment. In the less developed countries particularly, the meaning of this ratio tends to be distorted by " repeaters ", by children enrolling and dropping out half-way through the year, by children who do not stay in school long enough to become fully literate, and by enrolments which mean very little because the teachers themselves are barely literate.[15] But even when allowance is made for these factors, it is clear that a quite different pattern prevails in these countries from that which appears, for example, in the Latin American countries (see below).

The Borneo territories, on the other hand, provide an example of a completely different pattern (even though averages of three separate territories and of heterogeneous social economic groups are not too meaningful). The exploitation of oil in the Borneo territories has raised the per capita national income and energy consumption to about the same level as that of Japan, but the estimated infant mortality rate is one of the highest in Asia and the school enrolment ratio is far below the level of Ceylon, the Philippines and Thailand. This is a pattern which reappears in varying degrees in other parts of the world, where the intensive development of a single industry, in this case oil, pushes up the level of per capita national income and energy consumption without greatly affecting the percentage of population within the modern economy, or raising the social indicators which correspond more to the low level of income of the great majority of the population. The same pattern will be found in some countries in Africa and in Latin America.

Latin America is a semi-developed or unevenly developed rather than an underdeveloped region. This is reflected in the distribution of countries by per capita national income group;[16] in contrast with Asia, it is the small countries that fall at the lower end of the scale. All of the large countries have some industries and some types of commercial agriculture that are sufficiently productive to afford an adequate level of living to their workers as well as a surplus for investment, and some districts in which these industries predominate. The same countries support relatively large urban strata that enjoy high incomes, and important commercial and service groups dependent on them. The level of urbanization in Latin America is much closer to that found in Europe than in Asia. In spite of recent progress in industrialization, however, each country also has a low-income economy, mainly rural but including artisans and a rapidly growing urban sub-proletariat, of very low productivity and consumption. In view of the high rates of population increase, the absolute size of the latter sectors has not been reduced and levels of living in them remain extremely low, even though the national averages have improved. The existence of the dual economy means uneven distribution of income and relatively low social indicators.

A disproportionate number of Latin American countries appear amongst those falling into lower groups under the social indicators than under the economic indicators. Thus, half the countries falling into lower groups under school enrolments and infant mortaityl rates than under per capita national income are Latin American. Because of the unreliability of the data for many of the smaller countries, the bar diagrams on chart III tend to include the larger and wealthier countries,[17] but even from this selected group three countries show marked disparities between the economic and social indicators. In contrast with the Asian countries, in Latin America only Puerto Rico shows a relatively high level of school enrolments in relation to the level of per capita national income.

The disparity — as of the period covered by the statistics — is most striking in the bar diagrams in the case of Venezuela and Cuba. Venezuela falls into group II under per capita national income and energy, group IV under health and group V under school enrolments. Oil has given Venezuela a level of per capita national income which is out of all relation to the proportion of population in the modern economy. Very recent efforts, however, to use some of this wealth to transform the economy and improve social services are not reflected in the statistics. Some 40 per cent of the male labour force in Venezuela (in the period to which the statistics apply) found employment in agriculture, while only 7 per cent of the national income originated in agriculture. Thirty-two per cent of the national income originated in mining (mostly oil). In Cuba (where the situation may also have changed radically since 1959), although the groups outside the modern economy are relatively unimportant, and wage levels, even in agriculture, were higher than in most other Latin American countries, the one-crop economy did not provide satisfactory levels of living, mainly because of the high rate of seasonal unemployment.

Mexico and Brazil, while extremely dissimilar, can be grouped together as two countries that appear to have entered into a period of continued economic growth, in which, moreover, an attempt is being made to spread the benefits of recent industrialization more evenly through the country.[18] The low level of school enrolment illustrated in the diagram reflects the cultural lag of the rural population, which has been cited as one of the main retarding factors in Brazil's development.[19] The problem of raising school enrolments is compounded by the very vastness of Brazil, where much of the rural population is thinly scattered in the roadless hinterland,

[15] See the discussion in the 1957 *Report on the World Social Situation*, United Nations publication, Sales No.: 57.IV.3.

[16] Group I, 0; Group II, 1; Group III, 6; Group IV, 6; Group V, 9; Group VI, 1.

[17] In the case of two of the selected countries, Brazil and Cuba, the infant mortality rates are only approximations, and in other cases the official figures may be incomplete and therefore understate the true level of infant mortality. The exchange rate raises particular problems for national income figures in the case of Argentina, Venezuela, Brazil and Chile.

[18] See " Synthesis of a Socio-economic Typology of the Latin American Countries ", prepared by Rev. Roger Vekemans for the Expert Working Group on Social Aspects of Economic Development in Latin America, December 1960.

[19] Economic Growth: *Brazil, India and Japan*. S. Kuznets, ed., Durham, N.C., Duke University Press, 1955.

rather than grouped in villages, and lives to a great extent outside the bounds of the market economy.

Argentina and Chile are examples of countries in which a majority of the population has been literate and within the modern economy for some years. Argentina shows a pattern relatively close to that of economically developed European countries, although it is not currently in a phase of economic expansion. In Chile, the infant mortality rate indicates a health level relatively low compared with the level of the other indicators.

In Puerto Rico, the rapid development of the past ten years has transformed the structure of the economy and has been accompanied by a declining birth rate; the rate of natural increase is now down to 1 per cent per annum. Education and public health, particularly preventive medicine and nutrition, have been given high priority in the context of development, and this is reflected in the relatively high level of the two social indicators, particularly the school enrolments.[20] The Puerto Rican pattern has more in common with that found in some European countries than with that of the majority of Latin American countries.

From the bar diagrams of European countries in chart IV, it can be seen that the variation between the social and economic indicators is much smaller than in the case of the selected Asian and Latin American countries, particularly among the high-income countries in Europe. It is doubtful whether too much should be made of the small variations in pattern that do exist and only one or two general comments will be made. From their development profiles, there seems, for example, to be a group of high-income countries, including Denmark, Norway and the Netherlands (also Finland and Switzerland, which are not given on the chart) which are not among the most industrialized, as measured by energy consumption, but have high-income agricultural sectors, and which show very high levels of health and relatively lower school enrolments. Many explanations can be offered of this. The low infant mortality rate may be due to the quality of the national health services; it may also be due in part to the fact that, whereas incomes (and health levels) in rural areas ordinarily tend to be lower than urban districts in developed countries, in these particular countries the rural incomes have been brought closer than usual to urban incomes.[21] Both the Norwegian and Netherlands case studies to be issued separately emphasize the high priority given in the period following the Second World War to measures taken to secure greater equality of incomes, particularly as between agricultural and industrial workers. The relatively lower level of school enrolments, on the other hand which shows up particularly clearly in the case of Denmark, may well be due to a difference in definition and coverage of the statistics, or to the quality of education (which can reduce the number of years required in school to reach a given level of accomplishment), or it may also be associated with the relatively greater importance of the agricultural sector — children in agricultural families usually do not take as much formal education, particularly vocational training, as do those in the urban-industrial milieu. By way of contrast, several of the most highly industrialized countries in Europe, such as the Federal Republic of Germany and Belgium, where the energy consumption is high in relation to the level of per capita national income, show a comparatively high level of school enrolments and in some cases a slight tendency to fall in a lower group under infant mortality.

Amongst the European countries included in chart IV, Ireland and Greece stand out by virtue of the higher level of both social indicators in relation to the economic indicators. Ireland is in the exceptional position of having a declining population due to continued emigration, which in turn is due to lack of economic opportunity. As in the case of Ceylon, the economic lag in relation to the social situation has been publicly recognized and new policies have recently been established to deal with it. The *Programme for Economic Expansion*, outlined by the Irish Government in 1958, pointed out that the contribution by industry to the national income was much below that of the average for countries belonging to the Organization for European Economic Co-operation and that the only way to raise living standards and provide employment opportunities was to increase production. It is stated in paragraph 7 of the Programme that

> "there is general agreement that productive capital expenditure — productive in the sense of yielding an adequate return to the community in competitive goods and services — must receive a greater priority than at present in the public capital programme. It is on this fundamental principle that the present programme of economic development is based. The social capital investment of past years has given us an infrastructure of housing, hospitals, communications, etc., which is equal (in some respects perhaps superior) to that of comparable countries. What is now required is a greater emphasis on productive expenditure which by increasing national output — particularly of goods capable of meeting competition in export markets — will enable full advantage to be taken of that infrastructure and in due course make possible and indeed necessitate its further extension. The expected decline in social capital expenditure in the coming years will afford the opportunity — and underlines the necessity — of switching resources to productive purposes." [22]

[20] See "Planning for Balanced Economic and Social Development in Puerto Rico" (E/CN.5/346/Add.2): "The education profession might question whether the purpose of education is to assist economic development. While it is true that such is not the primary aim of education, economic growth will be retarded by the lack of an educated and trained labour force. Actually, in Puerto Rico the educational demands of economic development were found to be greater than those set by social targets."

[21] This hypothesis is consistent with the observation that in highly developed countries like the United States, where a substantial differential in rural-urban incomes exists, infant mortality rates tend to be higher than would be expected from the level of economic development.

[22] *Programme for Economic Expansion*, Dublin Stationery Office, 1958 (Pr. 4796).

Chart III

SELECTED COUNTRIES AND TERRITORIES IN LATIN AMERICA

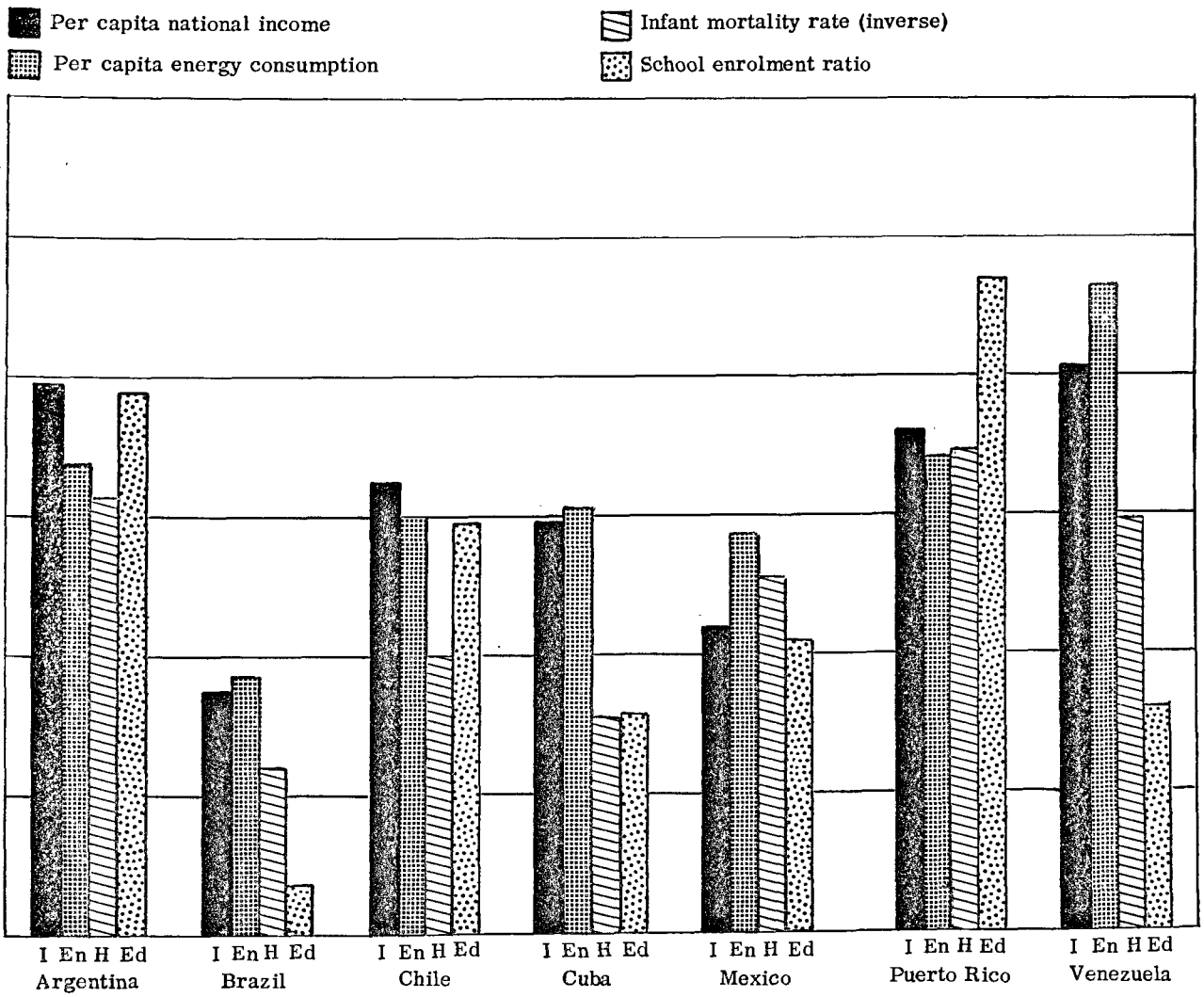


Chart IV

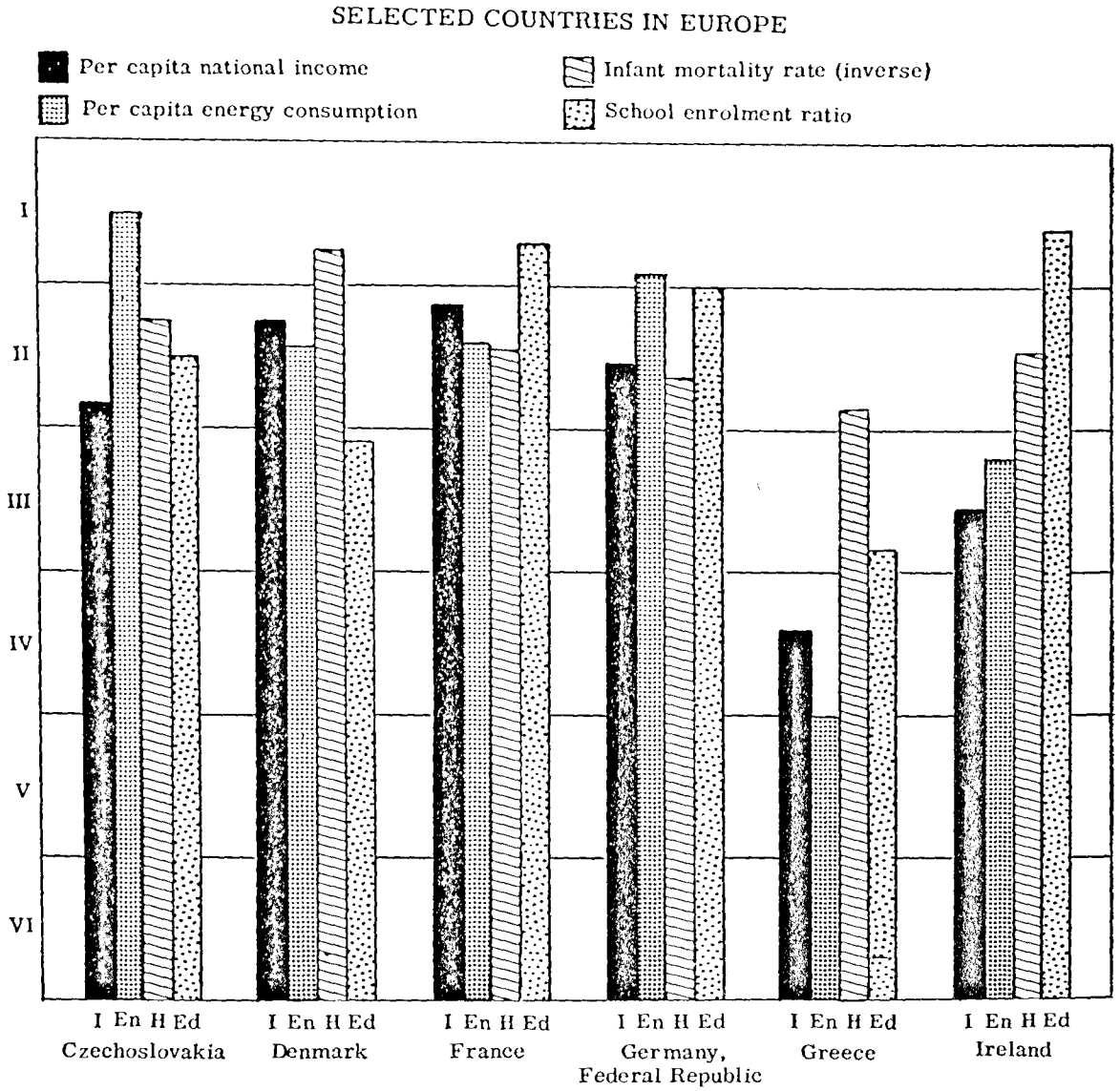
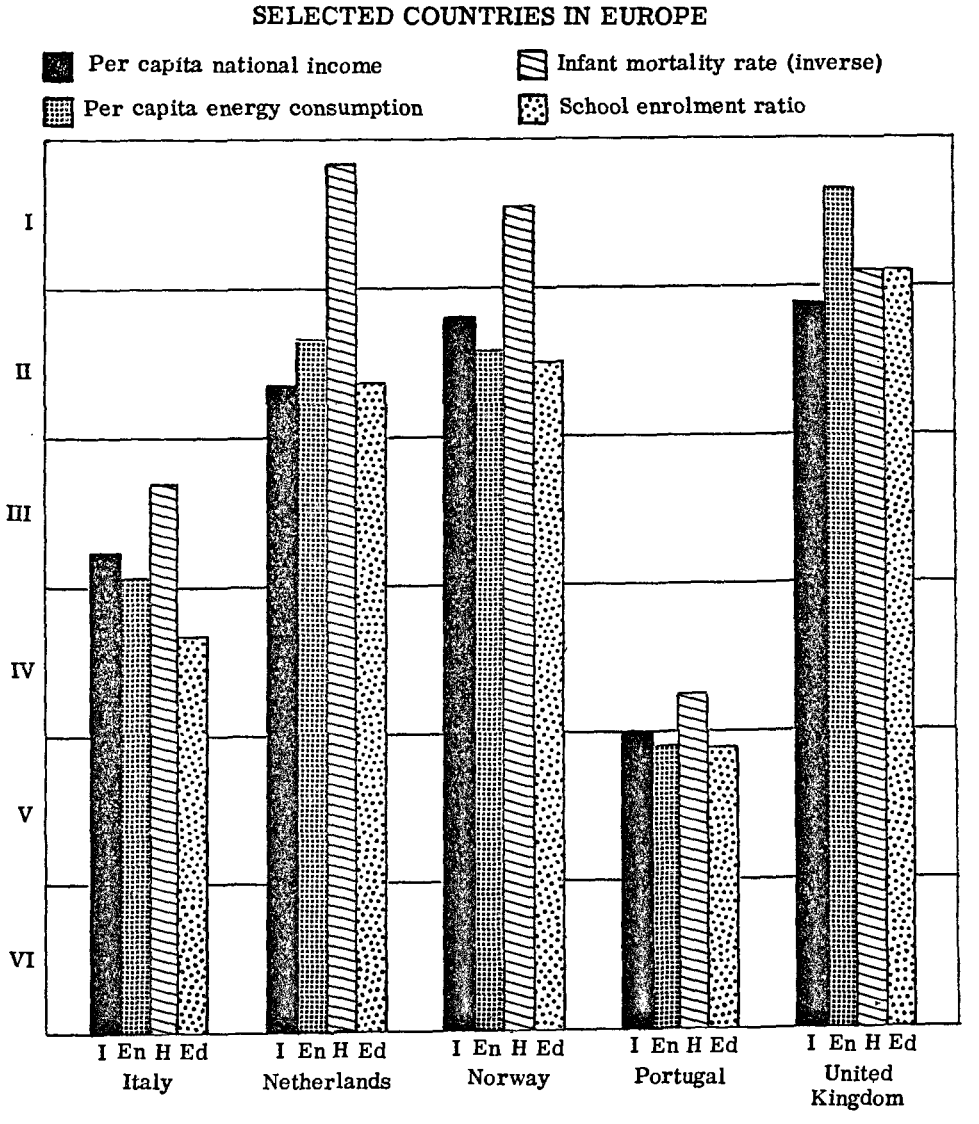

SELECTED COUNTRIES IN EUROPE
Per capita national income
Infant mortality rate (inverse)
Per capita energy consumption
School enrolment ratio
I
II
III
IV
V
VI
I En H Ed
Czechoslovakia
Denmark
France
Germany, Federal Republic
Greece
Ireland

Chart IV *(continued)*



In the case of Greece, the high level of social indicators, particularly health, in relation to the economic, is at first sight a little difficult to reconcile with the overall picture of the Greek economy, including the wide regional and urban-rural income differentials that are known to exist. To some extent, the relatively low infant mortality rate may be related to the climate and the water supply system, as well as to the secular fall in the birth rate. It is also significant that Greece, as well as Italy and Spain, ranks relatively high in the number of physicians available in relation to the size of the population.

Czechoslovakia has been included on chart IV, although the centrally planned economies of Europe raise special problems as to the comparability of the national income figures, because of exchange rate difficulties and the range of error in making an allowance for services (see notes to table 5). On the whole, these countries appear to follow the pattern of the industrialized west European countries, except that in nearly all of them the level of energy consumption is relatively more advanced than the estimated level of per capita national income.

Countries of North America and Oceania have been included in chart V for comparative purposes, although the question of fixing the appropriate top limit to group I creates certain methodological difficulties. In per capita national income and energy consumption, for example, the United States of America falls outside the probable limits of group I, and, to be strictly accurate, should be in a separate group of its own. New Zealand, on the other hand, achieves the distinction of having its educational enrolment slightly above the top level of countries included in group I. At the same time, New Zealand is relatively low in its level of industrialization as measured by energy consumption. The levels of school enrolment and the infant mortality rate indicated in the United States of America diagram, while indicating high achievement are lower than might be expected from the very high level of per capita national income and energy consumption. This would appear to reflect the existence of " pockets " of low-income groups in the country, particularly in certain rural areas (see chapter I on rural-urban differentials) and among the negro population. The level of school enrolment would undoubtedly be higher, on a comparative basis, if higher education enrolments were also taken into account in the school enrolment indicator.

Patterns of distribution of income and welfare

It has been suggested in the previous section that many of the differences in social-economic patterns can only be explained in terms of the underlying social and economic structure and the distribution of income among different groups. For example, exceptionally low infant mortality rates found in some high-income countries may be explained in terms of comparatively high rural incomes and absence of urban-rural or other differentials; correspondingly the disparity between economic and social indicators, in cases where the latter appear to lag behind, is frequently an indication of inequality of income distribution. This follows partly from the nature of the measures used, since the infant mortality rate and the school enrolment ratio reflect the percentage of the total population affected, whereas national income averages are not affected by the distribution pattern.

In the *Preliminary Report on the World Social Situation*,[23] figures were cited for selected countries which suggested that, around 1950, inequalities of income were greater in less developed countries than in developed countries, and that in the case of such high-income countries as Canada, Denmark, Sweden, the United Kingdom and the United States, the richest tenth of the population received in recent years around 30 per cent of the total income before taxes, while in several less developed countries the share varied from 33 per cent to over 40 per cent.

More recent figures[24] bear out this suggestion, although it is clear that there is a good deal of variation within the less developed countries, owing partly to different methods of estimation and also to different patterns and levels of development amongst the less developed countries themselves. The hypothesis has been put forward that marked inequality of income distribution may be characteristic of a partially developed economy in the process of change and that, prior to the beginning of industrialization, the income distributions may have been less unequal.[25]

The very scattered figures that are available suggest that, as a rule, inequality of income distribution is greater in Latin America than in Asia. A recent estimate indicates that, in Mexico in 1957, 16 per cent of the population, composed of the families in the higher income brackets, received 56.5 per cent of total national income. In Venezuela, in 1957, 12 per cent of the population comprising the higher income groups obtained 49 per cent of the total income, while a very rough estimate for Brazil indicates that the higher income groups (17 per cent of the population) received 63 per cent of the national income.[26]

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[23] United Nations publication, Sales No.: 52.IV.11, p. 132.

[24] T. Morgan, " Distribution of Income in Ceylon, Puerto Rico, the United States and the UK ", *Economic Journal* (London), December 1953. Also " Income Distribution in Developed and Under-developed Countries: A Rejoinder ", *Economic Journal*, March 1956.

[25] M. G. Reid, " Survey of Ceylon's Consumer Finances, A Review Article ", *American Economic Review* (Evanston), December 1956.

[26] Jorge Ahumada, " Economic Development and Problems of Social Change in Latin America ". Paper prepared for the Expert Working Group on Social Aspects of Economic Development in Latin America, UNESCO/SS/SAED: LA/A-1, December 1960. The writer suggests that, " on the basis of the data cited, and other additional statistics, it can be estimated that in Latin America as a whole, during the period immediately following the war not more than 20 per cent of the population in the upper income brackets received not less than 60 per cent of total income leaving the other two-fifths for the remaining 80 per cent of the population ".

Chart V

SELECTED COUNTRIES IN NORTH AMERICA AND OCEANIA

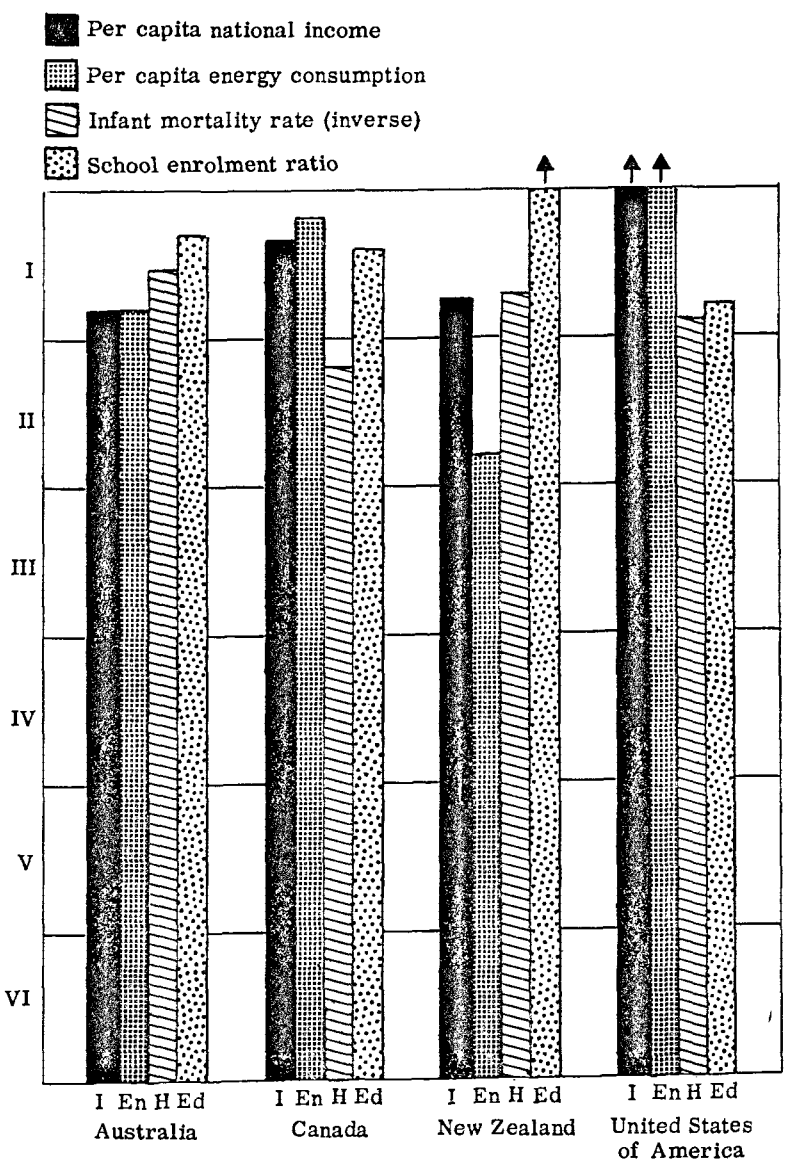

Table 8. — Distribution of income in the United States of America, the United Kingdom and India

Spending units *	Percentage of total income received before taxes: United States of America 1952	United Kingdom 1952	India 1955/56	Percentage of total income received after taxes: United States of America 1952	United Kingdom 1952	India 1955/56
Top 10 per cent	31	30	34	28	26	33
Top 20 per cent	46	44	47	43	40	46
Top 50 per cent	77	75	75	76	74	74

Sources: Figures for the United Kingdom and the United States of America from Lydall and Lansing, "A Comparison of the Distribution of Personal Income and Wealth in the US and Great Britain", *American Economic Review* (Evanston), March 1959. Figures for India from H. F. Lydall, "The Inequality of Indian Incomes", *The Economic Weekly* (Bombay), Special Number, June 1960.

* "Income receivers" in the case of the estimate for India.

On the other hand, the figures for Ceylon do not reflect such a high degree of inequality. A recent estimate of income distribution in India, made by combining sample survey and income tax data, also shows a more even distribution of income when compared with the Latin American examples, although a less even distribution than in more industrialized countries. In table 8, the figures for India are given with the figures for the United Kingdom and the United States of America for purposes of comparison. The distribution both before and after income tax is given, which shows very clearly the effect of progressive income tax in both the United States of America and the United Kingdom on the top 10 per cent of income receivers in comparison with India.

If it is even approximately true to suggest that in Latin America 80 per cent of the population of a country may in fact receive only 40 per cent of the national income, and in Asia that 80 per cent of the population may receive only 55 per cent of the (very much lower) income, it follows that the great majority of the populations of these countries are living at considerably lower levels than is implied by the national averages, with all that this means in terms of human welfare or lack of welfare.

The use of deciles or co-efficients of concentration to describe the distribution of incomes is more valid for the more highly developed and economically and socially integrated countries than for countries in the lower three income groups, where such over-all measures tend to obscure the crucial fact that the populations are not homogeneous and that it is the distribution between major social-economic groups that is the significant factor. In the less developed countries, the most significant gap is usually between the "modern" economy and what may loosely be called the "traditional" economy. This partly coincides, but not entirely, with the difference between market economy and the subsistence sector, because the traditional economy may also produce for the market. It partly coincides, but again not entirely, with urban-rural differences; the modern sector is mainly urban and the traditional mainly rural, but there is today a growing transitional group, consisting of unskilled and under-employed workers who have drifted into the towns and who no longer have a tie with the land, but who have not been absorbed by the modern economy. Very often the gap between the modern and traditional economy is associated with ethnic differences. It may also be associated with regional differences within countries.

Thus, in spite of wide differences in national average per capita incomes, there is considerable evidence that practically all countries of Africa, Asia and Latin America have sectors ranging from sizable minorities to overwhelming majorities that have real per capita incomes calculated by present methods of measurement at $50-$75 per annum.

In Latin America, although average per capita income for the region as a whole is considerably higher than the regional average for Asia and Africa, a few national studies of internal distribution of income suggest that the levels of the depressed sectors of the population are rather similar throughout Latin America and not very far from those of the masses in Africa and Asia. In Ecuador, a study prepared by the *Departamento de Investigaciones Económicas* of the *Banco Central* [27] divides the population into three strata by income:

Socio-economic stratum	Number of persons	Average annual income in $US	Total income in $US
High	42,087	2,062.2	86,800,000
Middle	807,148	195.0	157,400,000
Low	2,717,482	100.4	272,800,000

The study goes on to point out that the "low" stratum includes a sub-stratum of Indian agricultural labourers, who participate in the monetary economy

[27] "Estimación del Ingreso Atribuido al Sector de Autoconsumo del Ecuador en 1954", United Nations, ST/STAT/CONF.7/L.11.

hardly at all. About 440,000 of these receive no monetary income and about 600,000 receive an average of about 40 per cent of their total imputed incomes in money. The average per capita imputed income for these two groups is between $30 and $40 annually, "which barely serves to maintain them at a subsistence level".

In Ecuador the depressed sector of the population is almost entirely Indian, but the gap in incomes appears to be as wide in the non-Indian countries. In Venezuela, according to estimates made by a team of economic consultants, the average private income (of heads of families, etc.) in Caracas in 1957 was 14,500 bolivars per annum (about $US 4,200), in rural areas only 1,500 bolivars ($US 430).[28] In 1955, the national per capita income was calculated at 2,237 bolivars ($US 660) while field inquiries in five sample communities in the main agricultural regions of the country found an average net per capita income among small cultivators — including the imputed value of home-produced foods — of about 125 bolivars ($US 37).[29] These figures illustrate in extreme form the lag between the modern and traditional sector in Venezuela, which to a large extent lies behind the pattern of discrepancy between economic and social indicators discussed above.

In Asia, as indicated above, the gap between modern and traditional sectors may not have resulted in such an extreme inequality of income distribution as in the Latin American examples. At the same time, the modern sector in most Asian countries is much smaller in relation to the traditional, and the per capita national income, in which the two sectors are combined according to their weights, is correspondingly lower. The example of the Philippines has already been cited. Commenting on the low level of subsistence of a large part of the rural population, and on the apparent disparity between tenant farmer per capita income of about 100 pesos and the national average of about 360,[30] the authors of the Five-Year Development Programme conclude that "it seems reasonable to assume that the rate of increase in the national income, if true, represents on the whole gains made by the Manila area and outside it by the higher income groups and that similar gains in the other sectors of the economy have not materialized. For the country as a whole, this represents a somewhat lopsided development."

The gap between modern and traditional economies is found in exaggerated form in those countries where the modern sector is run by a small minority, and where the already great economic differences are intensified by ethnic differences. The average level of income of the African population, in countries where there is a significant European population, bears little relation to the national averages. There is some evidence [31] that the average African per capita incomes may be higher in the typical peasant cash crop (export) economies than in those countries where foreign settlement and investment in mining have provided the spur to the development of the modern economy, although national averages may be higher in the latter.

These different patterns of distribution, which are affected by different structural patterns, have important welfare implications. In general, those countries showing considerable "imbalance" between economic and social indicators have greater inequality of income distribution, either because of the heterogeneous nature of the population or because of investment — usually foreign — in a single field, the benefits of which are not widely diffused through the population. The imbalance is greatest in countries where diffusion of income is made more difficult by rigidities in the social-economic framework due, for example, to antiquated land tenure systems or to racial cleavages which accentuate already sharp economic cleavages.

Conclusion

It has been suggested in chapter II that, while it is very difficult to define balance, it may be possible to define evident imbalance. In the preceding paragraphs an empirical analysis has been made of the existing interrelationships between selected economic and social indicators in a large number of countries. If countries are grouped under these indicators, it seems from an examination of the data that those countries where considerable discrepancies exist between the economic and social indicators ("considerable" in this case meaning a two-group difference) are usually countries where the existence of social or economic strains reflecting this disparity are widely recognized; especially where the economic indicators are much higher than the social, political strain and instability are also apt to be quite marked.

It may turn out that, in the light of the country's background, there is some obvious reason for the discrepancy. But in many cases, the discrepancy is openly recognized as a gross imbalance and measures have been or are being taken to counteract it. This at least provides a clue to what is meant by imbalance.

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[28] Carl S. Shoup and others, *The Fiscal System of Venezuela, a Report* (Baltimore, Johns Hopkins Press, 1959), p. 22. The private income of the head of a family is, of course, not comparable with the per capita national income.

[29] George W. Hill and others, *La Vida Rural en Venezuela*, Johns Hopkins Press, Caracas, 1958.

[30] See *The Five Year Economic and Social Development Program*, op. cit., p. 4. "This low level of per capita national income for the whole country seems indicative of the conditions of poverty and want characteristic of the rural areas where a majority of the people live and are engaged in agricultural pursuits marked by primitive methods and practices that have often not been touched by technological progress for centuries... available information suggests that the per capita cash incomes in selected *barrios* in Central Luzon in areas where the tenancy system predominates ranged from 96 to 107 pesos per farmer (as distinct from a national average of about 360 pesos). This seems to confirm that a large part of our rural population has incomes still close to bare subsistence levels."

[31] See Lord Hailey, *African Survey* (Oxford University Press, revised edition, 1957), p. 1275. Also figures on African income in a recent report on general economic development in the Non-Self-Governing Territories (United Nations, A/4166).

On the other hand, smaller differences (differences of one group or less) appear to be a normal occurrence and part and parcel of the process of development. There are in fact only a few countries which would show more or less level "profiles", and these are not necessarily amongst the most dynamic at the present time.

Thus, while in some cases an uneven pattern appears to reflect a negative situation in that total development is held back by a lagging factor, in other cases the disparity appears to be a step in a dynamic forward-moving process. A more detailed study of trends over time will be needed to throw light on the relationship between the cross-section patterns analysed here and the long-term process of economic and social development.

Chapter IV

EXPENDITURES FOR SOCIAL PURPOSES

A quantitative appraisal of social programmes on a comparative basis must rely to a considerable extent on expenditure data, the best single measure of the allocation of national resources.[1] These statistics, however, have serious limitations.[2] Although indeed helpful, and convenient to use, they do not in themselves provide a sure test of how strong an effort a country is making in the social field, or of how well balanced its social and economic programmes are. This is partly because the available figures are incomplete and of uneven value, but it would also be true even if solutions were to be found for all the conceptual and practical problems in obtaining and presenting expenditure data. As a safeguard against the drawing of unwarranted conclusions from the data to be presented here, both these points need first to be considered in some detail.

Limitations inherent in expenditure data

Apart from the deficiencies that can, in time, be overcome, there are at least three kinds of limitation inherent in even the best and most complete expenditure data, for an inquiry in a field such as this. First, expenditures may be misleading even as a purely financial index. In the public sector, information on revenues, too, will sometimes be required for a complete picture of the financial support that social programmes are receiving from investment and budgetary policies. Tax exemptions granted to non-profit institutions of an educational, religious or philanthropic character have much the same end-effect as grants or subsidies to them; yet in governmental accounts, they reduce revenues rather than increase expenditures. Further examples are government loans at artificially low rates of interest for low-income housing, and any other social programmes in which a Government supplies — or else, through a tax reduction, enables others to supply — a commodity or service at a concessional price.

Social measures that operate by way of reduction of revenues are quantitatively important in some cases; especially when income taxes come to play a major part, they create opportunities for a multiplicity of specific exemptions and deductions, quite aside from their general redistributionist character. For example, Norway grants children's allowances, but also allows tax deductions for children, in the direct income tax payable to the State and the municipalities. In the fiscal year 1956-57, the estimated amount of the deductions was nearly 2.5 times the amount of the allowances and was equal to 20 per cent of the outright social expenditures (or 16.8 per cent of a combined total inclusive of the deductions themselves).[3] On the other hand, Governments may also levy charges for medical, educational or other social services rendered, and, to that extent, revenues are increased. A Government's net social expenditures, after deducting such charges, may be significantly less than its gross expenditures — a further point to be borne in mind when international comparisons are undertaken.

A second limitation — in this case, a limitation of the data for the private sector — is that these financial data leave out of account that part of the national input of resources which takes place directly, without transactions in money. In justice to this subject, it should be emphasized that something much broader than a conventional statistical problem is involved. Non-monetized investment and other non-monetized transactions are typical of traditional rural subsistence in under-developed countries and may consequently represent a very substantial fraction of the national effort. Only a small part, however, is given an imputed value enabling it to be reflected in systems of national income accounts, while the rest goes unnoticed statistically. Hence the magnitude of the income and investment of under-developed countries tends to be underestimated in relation to the advanced countries, and an element of uncertainty is introduced regarding the relative magnitude of the under-developed countries' efforts in the social field. Probably in most cases their capital formation figures tend to understate the social side in relation to the economic side.[4] Housing may

[1] Other important measures of the allocation of resources — less useful, however, in the present connexion — include statistics of labour force distribution, industrial origin of gross domestic product, and (for some purposes) energy consumption.

[2] For an analysis of many of the conceptual and practical measurement problems touched on in this chapter, see N. T. Wang, "Some Problems of International Comparison of Public Social Expenditures", *Indian Economic Review* (Delhi), vol. II, No. 2, 1955. See also chapter XII, "Financing of Programmes of Social Development", in United Nations, *International Survey of Programmes of Social Development*, Sales No.: 55.IV.8; and *Economic Survey of Asia and the Far East, 1960* (Sales No.: 60.II.F.1), Part II — "Public Finance in the Postwar Period", especially chapter 2 — "Government Expenditure".

[3] "Planning for Balanced Social and Economic Development in Norway" (E/CN.5/346/Add.3).

[4] See section 4, where the view is analysed that figures for current and total government expenditures sometimes overstate the social side in relation to the economic.

often form a larger percentage share of non-monetized investment than it does of monetized investment, so that figures limited to actual expenditures will significantly understate the attention that housing is receiving in the allocation of the nation's resources.[5] Even if a particular country's non-monetized investment is going into land improvement and other economic items to a greater absolute extent than into social items such as houses, schools and clinics, its monetized investment will be apt to favour the economic side still more.

The third and most fundamental limitation of expenditure data as an index of social progress is that progress obviously depends not only on the quantum of expenditure and effort put in, but also on qualitative factors in the broadest sense of the term. The rate of social development will, to be sure, tend to reflect the volume of resources assigned with that end in view, other things being equal.[6] But it is also necessary to ask how appropriate a country's social programmes are in relation to the current possibilities; how well they are organized; how effectively they are carried out — judging this in human as well as technical terms and considering at the same time the prices paid to achieve what they do accomplish; how well qualified the teachers are to teach, for example. In the final analysis, the main interest attaches to results, or output, rather than to the monetary (or non-monetary) input. As a step in the direction of measuring results, many Governments are devoting increased attention to "performance budgeting", or budgeting in "real" or physical terms (e.g., number of hectares planted with trees, number of students enrolled in trade schools, number of patient-days in general hospitals, number of tax investigations conducted) and not in financial terms alone.[7] No doubt the most important factor of all, in the equation involving expenditures and results, is the institutional or policy environment. At a particular juncture it may be that certain governmental actions — such as measures of land reform, or beneficial labour legislation, or other measures in the interest of social justice, or an effective full employment policy, or a decision to publicize and support family planning — may cost comparatively little in terms of money but may have large results in advancing social development. There is thus the danger that an analysis in terms of expenditures alone may lead to undue optimism in some cases and to undue pessimism in others.

It remains to be noted that the interpretation of even the best of data on social expenditures is subject to basic conceptual difficulties as well. In particular, what *is* "social"? and should all such expenditures be counted, or only "developmental" expenditures? Regarding the first of these questions: should housing, for example, be considered an economic item, as some Governments do consider it, or should it be considered a social item, as is done in *A Manual for Economic and Functional Classification of Government Transactions*?[8] The point is debatable, of course, since housing has both economic and social effects, even in the first instance as well as in the longer run. Here the classification scheme used in the *Manual* is followed (and applied to the private sector as well, to the extent that it is relevant and data are available), with (1) education (2) health; (3) social security and special welfare services; and (4) other social services as the main social categories, and with housing included under "other social services".[9] Developed in consultation with government experts in the several regions, the *Manual* is being widely consulted as Governments in increasing numbers undertake the work of reclassifying their accounts on both an economic and a functional basis.

Regarding the kinds of expenditure to be considered it would seem, in principle, that an analysis of social and economic development should be concerned with developmental expenditures only, and should omit all others. Moreover, in this connexion there are many attractions in the idea of distinguishing a new category which is not simply capital expenditures under a different name but which includes also certain recurring or current account expenditures that promote development (as a minimum, for example, those devoted to agricultural extension, scientific research and technical education) and excludes certain capital expenditures that do not (for example, some of those devoted to public buildings and monuments). A number of Governments do, in fact, embody this kind of distinction in their development plans, or in some cases they adopt so-called developmental budgets as a supplement to their regular budgets.[10] However, the definitional problem presents such serious difficulties that, up to the present, no generally agreed basis has been found for deciding which expenditures are developmental and which are not. In the present chapter, therefore, both capital and current expenditures for social purposes are considered, to the extent that data are available.

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[5] Housing as such after deduction of extraneous elements. Quantitative estimates should in particular allow for the fact that, where a single structure serves both as a house for the owner and as a barn for his livestock, the latter component is clearly economic rather than social.

[6] In the field of health, in particular, it may prove possible to *reduce* certain major expenditures (for example, the expenditures required to maintain large numbers of hospital beds for patients suffering from tuberculosis or mental illness) once a preventative or cure has been found and applied.

[7] A preliminary draft "Manual on Programme and Performance Budgeting" was prepared by the United Nations Secretariat for the Third ECAFE Budget Workshop, held in Bangkok in August 1960.

[8] United Nations publication, Sales No.: 58.XVI.2, pp. 145-147.

[9] Certain modifications are, however, incorporated: highways are here included under economic services, and various urban services (water supply, sewerage and refuse disposal, etc.) are where possible included under social services — these being the most significant of the detailed modifications suggested in further discussions since the *Manual* was issued. See Report of the Third Workshop on Budget Reclassification and Management in the ECAFE Region (E/CN.11/L.85), pp. 60-62.

[10] Given an intermediate-term plan (say for five years), annual budgets will tend to represent short-term adaptations or modifications of the financial side of this plan as far as the Government's proposed action is concerned.

The comparative lack of information about private social expenditures

The first difficulty arising not from inherent limitations but from the under-developed condition of the existing social expenditure data is the relative absence of information about the private sector's social expenditures. What is available is mostly government expenditure statistics.[11] Government expenditures are, indeed, often the crucial factor in accelerating a process of economic and social development; it is scarcely necessary today to emphasize the importance of budgets for economic policy — their actual and potential influence on short-term stability and on the rate and direction of long-term growth.[12] However, in framing their expenditure policies, Governments necessarily take into account the known or likely private expenditures in their own countries. Similarly, information about the expenditure patterns of other Governments can be fully useful to them (enabling them to decide on whether or to what extent such patterns provide good models for them to follow) only if the other countries' private expenditure patterns and public-private expenditure ratios are available for comparison with their own.[13]

Total government expenditures vary widely in relation to aggregate expenditures on the gross national product (GNP) — from about 10 per cent to nearly 40 per cent [14] among the countries and dependent territories shown below in table 3, and up to 59 per cent among the countries with centrally planned economies shown in table 4. Tradition and social philosophy clearly play a leading part in these inter-country variations, and in the (to some extent independent) inter-country variations of public-private ratios in specific fields, for which few estimates exist. A Government with multiple claims against its limited financial resources may also, as a purely pragmatic matter, restrict its expenditures in areas where private agencies are already active.

Private non-profit institutions are often important in the social field — in education, usually above the primary level; in health, usually outside the field of measures against mass diseases; in housing; in various social welfare activities. As is stressed in the next section, local (as distinct from central) government can also be expected to play an important part. Moreover, an activity may be carried out privately although financed by government grants or loans, and sometimes a publicly owned industry may raise its finance privately in the capital market. Thus, when a statistical picture is sought of a country's expenditures for any given purpose — education, for example — many complications arise, as the accompanying chart [15] shows in a schematic way. Costs of the schooling provided under various auspices would be collected in the column at the right; costs *to* the various parties helping to finance education would be added in the row at the bottom.[16]

Information depicting the social expenditures that a country as a whole is making could logically be presented within the framework of a system of national income accounts. However, national income accounts and questionnaires are not at present drawn up in such a way as to yield information of this kind.[17] The United Nations and the specialized agencies concerned are studying the conceptual and practical problems to be solved before asking Governments to provide such information on a uniform basis in the future.

Aggregate (i.e., public plus private) capital formation in dwellings is the only capital outlay for social purposes which can be identified from the national income accounts. The first column of table 1 summarizes the latest information available, showing gross capital formation in residential buildings as a per cent of GNP for thirty-three countries in various stages of economic development.[18] The data have been averaged over a

[11] Except as otherwise noted, all expenditure data used in this chapter come from official national sources or from United Nations publications such as the *Yearbook of National Accounts Statistics* and the *Statistical Yearbook*. The analysis is limited to data available to the Secretariat on 1 February 1961.

[12] See, e.g., Economic Commission for Latin America, "The Fiscal Budget as an Instrument in the Programming of Economic Development", E/CN.12/521.

[13] This can be illustrated by comparing United Kingdom expenditures in the field of health with those of the United States of America. See table I and related discussion.

[14] A figure which has, of course, been greatly exceeded in time of war. Technically speaking, total government expenditures consisting partly of transfer payments cannot be considered a pure percentage of GNP; this point is discussed in connexion with tables 1 and 3 below.

[15] Reproduced from *Economic Bulletin for Asia and the Far East*, December 1959, p. 37.

[16] A partial picture of where the money for social programmes comes from is sometimes available, especially within the field of social security proper, for which the International Labour Office publication, *The Cost of Social Security* (Geneva, 1958) gives receipts and expenditures break-downs for thirty-two countries as of 1954. The sources of the funds which (disregarding about 3 per cent added to insurance funds) were paid out of various government accounts as social expenditures in Norway in fiscal year 1956/57 are given in detail in "Planning for Balanced Social and Economic Development in Norway", op. cit. Expenditures on education and housing are not included. The municipalities constituted the most important source in the aggregate, followed by the state, the population (premiums and special taxes) and employers (premiums etc.) in that order. Analysed by main categories of expenditure, the sources ranked as follows:

	State	*Municipalities*	*Employers*	*Population*
1. Health	3	2	4	1
2. Employment injuries and labour protection	3	–	1	2
3. Unemployment, employment exchanges, etc.	3	4	1	1
4. Old age, disability, etc.	3	2	4	1
5. Family welfare	1	2	4	3
6. General unspecified aid	2	1	–	–
7. Benefits to war-injured persons	2	–	–	1
8. Calculated tax deductions for children	1	2	–	–

[17] See *A System of National Accounts and Supporting Tables* (United Nations publication, Sales No.: 59.XVII.11).

[18] Data for certain countries with centrally planned economies yield the following approximate percentages of net material product (see table 4 for the concept of material product) in 1957 or 1958: Bulgaria, 0.5 per cent (covers centrally planned housing investment only); Hungary, 2.1 per cent (State housing investment); Poland, 2.7 per cent (housing investment in the socialized sector); USSR, 2.9 per cent (housing investment excluding private investment and investment with special funds of enterprises); Yugoslavia, 5.6 per cent (total housing investment, including private).

PROVISION AND FINANCING OF EDUCATIONAL SERVICES

A = likely to be significant; B = moderately significant; .. = negligible

Provided by	Financed by: Public sector — Central Government	Financed by: Public sector — Provincial and local governments	Financed by: Private sector — Households	Financed by: Private sector — Enterprises	Total expenditure for providing educational services
Public sector					
Central Government	A	..		..	
Provincial and local governments	A	A		..	
Private sector					
Non-profit institutions ..	B	B	A	..	
Enterprises	..	..	B	B	
Total expenditure for financing educational services					

five-year period, generally 1954-58, in order as far as possible to minimize cyclical fluctuations.[19] Secondly, it is possible in the case of a few countries [20] to obtain (again from national income statistics) an estimate of the extent to which private consumption expenditure is devoted to health purpose, as well as (from budget statistics) a concurrent figure for governmental expenditures on public health.[21] In the third column of table 1, these amounts, also expressed in terms of percentage of GNP, are added to give an inexact but suggestive measure of health expenditures in those countries. The countries in this and several subsequent tables are grouped according to their 1958 per capita income expressed in United States dollars, based on estimated parities. In *group 1*, the estimated per capita income was less than $100; in *group 2*, $100-199; in *group 3*, $200-499; in *group 4*, $500-899; in *group 5*, more than $900.[22] The order within each group is alphabetical.

The table does not, it should be emphasized, fully or exactly picture national expenditures for either housing or health in the countries concerned. With regard to housing, only capital expenditures on new construction and major alterations are shown. Government loans and grants for housing, being almost always for construction, are likely to be reflected indirectly, but non-monetized investments in housing are left out of account, although they are quantitatively important in many under-developed countries, with their large traditional or "subsistence" sectors, as was pointed out above. Also left out are all non-capital expenditures, notably rent payments by households.[23] With regard to the health expenditure estimates, several points should be noted. The private consumption component by definition excludes private capital formation, such as expenditures for the construction of private hospitals; moreover, the purchases at drug stores or chemists' shops that should be included (medicines) cannot always be distinguished statistically from those that should not (cosmetics). The government component understates

[19] The cycle is only partly eliminated, since boom conditions tended to prevail in housing construction throughout this period in a number of the economically developed countries of the west. However, the averaging helps, since, within this period, in two-thirds of all countries shown, the high year was at least 20 per cent above the low year, and frequently (fourteen instances) the difference was 33 per cent or more (ranging up to 110 per cent) of the low-year figure.

[20] A number of other countries report the "personal care and health expenses" component of private consumption not broken down to distinguish expenditures on personal care items (e.g., toilet articles and preparations, services of barber and beauty shops, baths and massage parlours) from health expenses strictly defined. These sums in 1958 amounted to 5.7 per cent of GNP in the Dominican Republic; 4.8 per cent in France; 4.4 per cent in southern Korea; 4.2 per cent in China (Taiwan); 3.8 per cent in Belgium; 3.3 per cent in Luxembourg and Peru; 2.9 per cent in Austria and Norway (1955-1956); 2.4 per cent in Italy; 2.2 per cent in Finland; 2.0 per cent in the Federation of Rhodesia and Nyasaland; 1.8 per cent in Ceylon; and 1.1 per cent in Ghana. The average of these figures, 3.2 per cent, would be reduced to about 2.0 per cent if deflated to the extent found necessary, on the average, when excluding identifiable "personal care" elements in the case of the countries in the second column of the table. In the case of Yugoslavia, consumption expenditure on material goods and productive services included a component of personal care and health expenses equal to 1.9 per cent of net material product; in addition, a slightly larger sum was spent by consumers for "non-productive" health services.

[21] In education, private as well as public expenditures have been estimated by UNESCO for a number of Non-Self-Governing Territories. See *Progress Achieved by the Non-Self-Governing Territories in Pursuance of Chapter XI of the Charter: Education in the Non-Self-Governing Territories* (A/4131), table 2 especially.

[22] Attention is called to the fact that this system of grouping differs slightly as to intervals and date of measurement from that employed in chapter III.

[23] National data on rent and water charges are published (combined) as a component of private consumption expenditure, in the United Nations *Yearbook of National Accounts Statistics*.

Table 1. — Elements in national expenditures for housing and health as per cent of gross national product [a]

Income group	Gross domestic capital formation in dwellings (1954-1958 average) [b]	Health expenditure estimates (1958)	
		Private consumption	Government expenditure plus private consumption [c]
Group 1			
China (Taiwan)	1.6 [b]		
Kenya	3.8 [a]		
Nigeria	2.7 [b]		
Tanganyika	5.2 [a]		
Group 2			
Ecuador	2.2	1.6 [d]	2.0 [d e]
Honduras	3.4 [b]	2.3 [f]	3.4 [f e]
Korea, Republic of	2.3		
Morocco	3.2		
Philippines	1.3		
Group 3			
British Guiana	3.1 [b]		
Cyprus	6.9		
Greece	4.8		
Jamaica		2.0 [d]	3.5 [d e]
Japan	2.0 [b]		
Malta	3.3		
Mauritius	3.2		
Panama		2.7	
Portugal	3.2		
Puerto Rico	4.4 [b]	3.2	
Group 4			
Austria	4.4		
Belgium	4.4		
Ireland	2.5		
Israel	7.5 [b]		
Italy	5.5		
Netherlands	4.5	2.7	2.9 [e]
Group 5			
Canada	5.0	2.5 [d]	3.8 [d]
Denmark	2.8		
France	4.5		
Luxembourg	4.0		
New Zealand	5.1 [b]		
Norway	4.6		
Sweden	5.3	1.4 [g]	4.1 [g]
Switzerland	5.1		
United Kingdom	3.0	[h]	3.2
United States of America	4.5	3.6 [g]	4.7 [g]

[a] Gross domestic product at factor cost for Kenya; gross domestic product at market prices for Tanganyika.

[b] Average of 1957 and 1958 for China (Taiwan); average fiscal years beginning 1952 and 1956 for Nigeria; 1953-57 average for Honduras; 1952-56 average for British Guiana; average of fiscal years beginning 1954-58 for Japan, Puerto Rico and New Zealand, average of 1953 and 1956 for Israel.

[c] *Not* an estimate of total national health expenditures: figures (1) exclude private capital expenditures, and, for Ecuador, Honduras, Jamaica and the Netherlands, expenditures of government other than central government (as explained in the text, this is an especially important limitation in the case of Ecuador and the Netherlands); and (2) probably involve considerable double counting of amounts transferred by Governments to individuals. (For extent to which central government figures may understate total government expenditures, see section 3. For imprecision involved in relating government expenditures, inclusive of transfers, to G.N.P., see section 4.)

[d] 1956.

[e] Central Government only.

[f] 1957.

[g] July 1957 - June 1958. (Data for Swedish local authorities are, however, calendar 1957.)

[h] Minor amount.

what the Government as a whole is spending on health in those cases where only the central government data are given; for example, in Ecuador and the Netherlands, central government expenditures are estimated to account for only about one-half and three-quarters, respectively, of total government expenditures for all purposes. On the other hand, when private and government figures are added together, a rather large element of double counting may be introduced, in the form of government transfer payments re-spent by the recipients. This is an important difficulty whenever separate government and private expenditures for social purposes are simply added up, without consolidation. The transfer payments earmarked for these purposes do express government policy as to how real resources should be allocated, but the actual allocation of the resources occurs only once, i.e., in response to the demand exerted by the recipients of the transfers.

The table does, however, show, for one thing, that the capital expenditures on housing of a substantial number of countries have been ranging from 1.3 per cent of GNP (the Philippines) to 7.5 per cent (Israel: data for 1953 and 1956 only). Eight countries devoted at least 5 per cent of their GNP expenditures to housing construction; twenty countries spent between 2.5 per cent and 5 per cent; only five spent less than 2.5 per cent. The average (unweighted arithmetic mean) of all thirty-three countries was 3.9 per cent, and the median 4 per cent.

Secondly, although the coverage is particularly limited among countries with low per capita incomes, there is evident, in the cross-section picture presented in this table, a tendency for the share of GNP devoted to housing construction expenditures to bear a direct relation to income.[24] This is especially noticeable if the dependent territories are excluded from consideration. From an average 2.3 per cent in groups 1 and 2 combined (the figure, however, is 2.9 per cent if Kenya, Nigeria and Tanganyika are included) the share rises to 3.3 per cent in group 3 (3.9 per cent with the dependent territories counted), 4.8 per cent in group 4 (4.3 per cent aside from the exceptional instance of Israel) and 4.4 per cent in group 5.

The fragmentary health expenditure estimates make generalization difficult. The average of the combined figures shown is equal to about 3.5 per cent of GNP — somewhat less than the dwelling construction average as a whole or for the same countries — with the range

[24] Historically, however, it would appear that the percentage of GNP devoted to housing in the United States and some other countries has declined as income has risen.

from top to bottom not very great. The data are insufficient for an analysis in relation to income levels. Personal spending on health appears, in this small sample, to constitute more than half of what Governments and consumers together spend; this conclusion, however, depends to some extent on the fact that health services and products tend to be higher priced in the private than in the public sector, and the result might in any case be altered if all levels of government could be included in all cases and if all consumer expenditures derived from government transfer payments could be screened out. Of incidental interest is the contrast between countries like Sweden and especially the United Kingdom, where expenditures on health are largely made by the Government, and countries like Canada and especially the United States, where they are largely private.

The gaps in the public expenditure data

All national Governments compile tables classifying their revenues and expenditures, but the information thus made available gives, as a rule, a very inadequate picture of expenditures for social purposes in the public sector. First, it commonly omits state or provincial or regional expenditures (if any) and those of the various local government bodies. Second, for various reasons it does not even cover the central government's social expenditures fully in most cases; a thorough "functional" reclassification of the data is needed for that, and inclusion of the accounts of autonomous social insurance funds and other funds together with the budget proper. Finally, there are many detailed differences in concept and accounting practice from country to country. Thus, the field of statistics of public finance is one in which international comparisons are treacherous in the extreme.

The incomplete picture that *central* government figures give is the first main difficulty. An examination of data from fifty countries indicates that, on the average, the expenditures (or, alternatively, revenues) of central or national Governments amount to about 80 per cent of those of all levels of Government combined. In the social field, however, it is evident that the central government's varying share tends to be substantially smaller — although tending to grow somewhat, especially as a result of a growth of social insurance. Thus, comparisons of government social expenditures based on central government statistics alone are far from conclusive, especially in countries with a federal governmental structure. Yet for most countries no other figures are readily available. Widely scattered as the local data are, their collection and publication, even on a sampling basis, tends to occur irregularly at best and with a considerable time lag.[25] The data for provinces or states, in federal systems, are, naturally, much more accessible; but the statistical task of consolidating them with the central government data on a uniform basis and without duplication often remains to be undertaken.

Tables 2 gives an indication of the situation in twelve countries at various stages of development. The main figures include grants and loans from the central Government to other levels of governments as a part of the central Government's share; the figures in parentheses show only the share of governmental activity that the central Government handles directly rather than the share that it finances. As will be seen, the central Government in nearly all instances and on the average accounts for a smaller share of government social expenditures than of government expenditures for all purposes combined,[26] and a still smaller share of health and of education expenditures.[27] This is not surprising,

Table 2. — Central government expenditures in terms of percentage of government expenditures at all levels

	Total	*Total social*	*Health*	*Education*
Canada (1956)	61 (54) [a]	49 (46)	16 (6)	5 (4)
Colombia (1957) [b]	59 (57)	44		36
Federation of Malaya (1958)	84 (70)	96 (96)	100 (100)	100 (27)
India (1954/55) [c]	71 (45)	45 (19)	26 (13)	15 (10)
Israel (1954/55)	78 (73)	69 (57)	60 (54)	58 (26)
Nigeria (1957/58) [d] ...	(40)	(16)		
Norway (1955/56) [e] ...	67 (58)	49 (39)	40 (25)	43 (22)
Tanganyika (1957) ...	84	83	80	86
Uganda (1956/57)	88 (80)	93 (78)		
United Kingdom (1955)	82 (73)	75 (63)	94 (89)	59 (15)
United States of America (1957/58)	64 (60)	38 (31)	26 (23)	9 (6)
Venezuela [b] (1956/57) .	93 (85)	70		73
Unweighted average ..	76 (66)	66 (54)	55 (44)	48 (16)

Note. — Figures are based on consolidated all-level data from which duplications due to inter-level transfers have been removed.

a Throughout this table, figures in parentheses represent expenditures after deduction of amounts transferred (granted or loaned) to other levels of government. (Transfer payments to the public are *not* deducted, however; in terms of expenditures on goods and services only, excluding transfers, as shown by a recent study of the public sector by the Economic Commission for Europe, the second figure for education in the United Kingdom would be about 1 or 2 per cent instead of 15 per cent).

b Un-reclassified data (tending to minimize social expenditures, especially at the central government level).

c Central government expenditures are functionally reclassified, but not state or local expenditures (the latter estimated partly from 1949/50 data).

d Estimated from unofficial data.

e Net expenditures, deducting fees and other charges for goods and services.

[25] For example, the study of social expenditures in India from which the figures in table 2 derive was obliged to use 1949/50 data for local bodies, together with 1954/55 data for the centre and the states.

[26] The case is similar under central planning systems, as is illustrated by the fact that expenditures on social and cultural measures (not including housing) constituted 43.6 per cent of total state expenditure in Uzbek SSR in 1958, as against 33.3 per cent in the USSR as a whole. The percentages for education and health were 25.3 and 12.2, respectively, in the Uzbek SSR, against 13.4 and 6.4 in the all-Union state accounts.

[27] On the basis of information in UNESCO's *International Yearbook of Education*, vol. XXI, 1959, the percentage of public expenditure on education accounted for by the central or federal budget for education in a number of additional countries in a recent year were as follows: Sudan, 89; Ethiopia and Iceland, 73; Belgium, 60; Denmark, 48; Japan, 34; Brazil, 31; Bulgaria, 16; China (Taiwan), 12 — for an average of 48 per cent (the same as in table 2).

since central Governments have the major responsibility for discharging the traditional functions of government, including defence, and usually also for promoting economic development, and since other levels of government are geographically closer to the people, and, in many cases, constitutionally responsible for welfare functions. Apart from non-self-governing Tanganyika and Uganda and the newly independent Federation of Malaya, the only significant variations from this pattern in this table appear in the case of the relatively large share of education shown as centrally financed in Venezuela and the centralization of health expenditures in the United Kingdom.

Not all transfers of funds from the centre to other levels of government are earmarked for specific purposes, but inclusion or exclusion of those that are — and that consequently express the national budgetary policy — can make a striking difference in the figures relating to the social field, as the table shows. It follows that, for countries where only central government data are available, much the better picture is obtained by including all such known sums. Even so, the part of government social expenditures which is financed (as well as executed) locally will still be missed. This must be borne in mind in evaluating the estimates presented in the next section, which in most cases are for central Governments only.

A second and equally important limitation of most government expenditure statistics is that they fail to identify all the expenditures for a given purpose at the central government level itself. This happens because, in the normal budgeting process, with its emphasis on accountability, expenditures are classified according to administering agency rather than according to purpose or function. In listing the total expenditures for which the ministry of health and the ministry of education (for example) are responsible, a conventional budget may well include some expenditures that actually are not for health or education, and is almost sure to omit substantial expenditures that definitely do serve those purposes. The net result is usually a very significant understatement of expenditures in the social field. For example, a special study of government social expenditures in India in 1954/55 concluded that central government expenditures on social services would be underestimated by about 50 per cent, in the absence of a regrouping or reclassification of items so as to bring out their real function.[28]

One reason why statistics drawn from conventional budgets so often understate the social side is that expenditures for building schools and hospitals are commonly lumped with other construction expenditures and assigned to the ministry or agency responsible for public works rather than to the agencies responsible for education and health. What appears under education or health then is little more than a record of expenditures on current account. But some of the current expenditures also tend to be overlooked — those made by ministries other than the one primarily responsible for the social field in question. Thus, the above-mentioned study of Indian social expenditures found that the central Government's budget estimates for 1950/51 included 93 million rupees in the revenue account, and 111 million rupees in all, to be disbursed by a dozen different ministries for educational purposes, although the Ministry of Education's own total was only 58 million in the revenue account, and 71 million in all: this is perhaps an extreme case.[29] Again, Governments may allocate to non-profit educational, religious or philanthropic institutions quite substantial sums which are used for various social purposes but do not affect the totals for those purposes as shown in a conventional budget.[30] In some cases also, understatement occurs because the budget is kept separate from "extra-budgetary" funds and accounts of the central Government, such as those of an autonomous social insurance system.[31] For example, France's expenditures for all purposes in its "general budget" for 1954 amounted to 3,114 billion francs, but the state total inclusive of a number of special accounts was 4,443 billion, and the latter amount in turn excluded the bulk of the social security expenditures, amounting to 1,545 billion, shown separately in the statistics.

The statistical problems mentioned are practical ones that can be solved by a careful functional reclassification of government accounts. A further difficulty, however, arises in connexion with government trading, financial and other enterprises. Such enterprises are viewed in national accounting practice as part of the enterprise sector and not of the "general government" sector, but do nevertheless belong in the government sector as a whole. Some of them are financially integrated with general government and do not keep their own reserves, apart from working balances. Their receipts and expenditures may appear in the budget on a gross or on a net basis. Others, often referred to as public corporations, have a greater degree of autonomy, but their capital formation or lending functions are financed primarily by grants or loans that are included in the

[28] United Nations, "An Exploratory Study of Social Expenditures in India", E/CN.11/L.58. The study also estimated that the understatement of the states' expenditures on social services as a whole would be about 20 per cent, and the absolute distortion in the case of education and health at least as great in the states as at the centre because of the larger state responsibilities in those fields.

[29] These totals include expenditures of the Department of Scientific Research, which was separate at that time, though later joined to the Ministry of Education; otherwise the latter Ministry's budgeted expenditures in fact amounted only to 50 million rupees on revenue account and 56 million in all, or half of the general total.

[30] In Brazil, a wide range of autonomous agencies working almost entirely in economic and social fields spent an estimated total of 106,522 million cruzeiros in 1957 (some of the figures relate to 1956). It is not clear from the published statistics to what extent their funds came from the federal budget, which in 1957 amounted to 118,712 million cruzeiros. Similar situations are found in many Latin American countries.

[31] There may also sometimes be elements of double counting, e.g., where school lunch programmes are included in both the education and health totals, or where special accounts are added to the budget without proper consolidation; but in practice such overstatements appear to be relatively infrequent and unimportant.

budget. They may be considered as forming part of a more broadly defined public sector. The dividing line is hard to draw with precision, and so is the line between the public corporation and the private corporation, since the Government may not need majority ownership for effective control. It may thus be hard to say, in principle, how much activity and expenditure the government sector (or the public sector) includes, and calculations as to the percentage of government (or of public) expenditure assigned to the social field will vary accordingly. This applies particularly to some of the more highly developed economies, where the expenditures of public enterprises may be large,[32] but it is sometimes a factor in less developed countries as well, especially if marketing boards are in use.

Among many other differences in concept and method that add to the non-comparability of government expenditure statistics from different countries, only two need be cited here. Some Governments receiving foreign aid include these sums in their budget receipts and expenditures totals, while others do not. It follows that international comparisons of the share of expenditure devoted to social objects will be affected, unless the aid component is first removed from figures in which it has been included or unless aid (and counterpart) funds and national funds happen to be used in exactly similar ways. Secondly, complete uniformity is not to be expected in the demarcation of fields to be included under the social heading. Multiple-purpose programmes, such as community development programmes and river valley schemes, are intrinsically hard to classify, and undoubtedly certain community services are, in logic, partly social, partly economic and partly "general". Differences in treatment are, therefore, sure to persist — particularly with regard to the broad social and economic aggregates — even after Governments have made strenuous efforts at systematic reclassification of their expenditures in terms of functions.[33]

Government expenditures for social and other purposes

Table 3 presents information on the extent to which the expenditures of the Governments of forty-one countries and dependent territories are directed into education, health and other social fields, as well as into a rather more diverse and harder-to-delimit assortment of fields that are commonly grouped together under the economic heading.[34] Table 4 presents information of the same general type, but based on slightly different statistical concepts, for the state social and cultural expenditures of eight countries with centrally planned economies.

The countries shown in table 3 are fairly evenly distributed among high, low and various intermediate per capita income groups.[35] The figures are based on statistics already reclassified with greater or lesser thoroughness on a functional basis, generally by Governments themselves; thus, one of the main statistical deficiencies discussed above has been largely eliminated as far as these countries are concerned, for the years shown. However, only central government expenditure data are available in two-thirds of the cases, and this circumstance introduces non-comparabilities of unknown but certainly very substantial extent — between countries with data for all levels of government combined and countries with data for the central government only, and also, within the latter group, between countries with varying degrees of expenditure centralization. (In the tables, for simplicity, two degrees of centralization only are distinguished: at least 85 per cent — figures italicized — and less than 85 per cent — figures italicized and also in parentheses.)[36] Other non-comparabilities also remain, the more obvious of which[37] are referred to in the table and its footnotes; some of the rest, although important, could be known only through a time-consuming process of examining the data behind the official reports. It is therefore necessary to stress that these figures represent rough approximations only, and that they vary too much in content and method of composition to allow of more than a broad type of analysis.

Table 3 relates the social expenditures of Governments in percentage terms both to their own total expenditures and to total expenditures on the countries' gross national product (GNP). Strictly speaking, the latter percentages could be considered inadmissible because the government expenditures include transfer payments to households — without which no adequate conception of social expenditures[38] could be obtained — but

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[32] In the case of ten Western European countries for which comparative data are presented in the 1959 *Economic Survey of Europe* (United Nations publication, Sales No.: 60.II.E.1), chapter V, table 1, public enterprise has a larger share than general government in gross fixed investment in Austria, France, Italy, Norway, Sweden and the United Kingdom, an equal share in Belgium, Denmark and the Netherlands, and a smaller share only in Finland.

[33] For purposes of international comparison it is, of course, primarily the specific items (e.g., hospitals, water supply, roads, police) that need to be presented on a uniform basis, such as that provided in the United Nations *Manual*. Once this is done, uniform larger aggregates can be readily obtained by recombining components where necessary.

[34] For a systematic study of slightly earlier data from sixteen countries and dependencies at various income levels, see Alison M. Martin & W. A. Lewis, "Patterns of Public Revenue and Expenditure", *The Manchester School of Economic and Social Studies*, Vol. XXIV, No. 3, September 1956. (Labour and housing are classified in that study as economic items.)

[35] The groups have been divided approximately at $100, $200, $500 and $900 *per annum*, as in table 1.

[36] The actual range extends from close to 100 per cent (Burma, Ceylon and Thailand) down to something like 50 per cent (Colombia and Ecuador). Reference is to expenditures for all purposes combined, not to social expenditures; the latter tend to be more decentralized, as was shown in table 2.

[37] Differences in time period; differences between budget estimates (which may subsequently not be fully realized) and final accounts; differences in coverage of the education category; the occasional use of net concepts which result in relative overstatement (Uganda) or understatement (Australia and Norway); etc.

[38] As contrasted with actual governmental operations, reflected in the (smaller) total of government expenditures for goods and services.

Table 3. — ESTIMATED GOVERNMENT EXPENDITURES FOR SOCIAL PURPOSES IN FORTY-ONE COUNTRIES AND DEPENDENT TERRITORIES, EXPRESSED IN TERMS OF PERCENTAGES, ABOUT 1958 [a]

Income group	Percentage of government expenditures			Government expenditures in terms of percentage of GNP [b]				
	Education	Health	Social items aggregated [c]	Total	Education	Health	Social items aggregated [c]	Economic items aggregated [d]
Group 1								
Belgian Congo [e]	*14.4*	*9.9*	*31.7*	*31.6*	*4.6*	*3.1*	*10.0*	*9.0*
Burma [e]	*7.6*	*2.5*	*15.0* [f]	*36.2*	*2.8*	*0.9*	*5.4* [f]	
India [g]	9.0	4.0	14.5	15.8	1.4	0.6	2.3	6.3
Kenya [b]	*13.7*	*5.0*	*26.4*	*22.3*	*3.0*	*1.1*	*5.9*	*4.4*
Nigeria [b h]			34.7	12.1			4.2	3.4
Tanganyika [b]	*19.5*	*8.7*	*30.7*	*14.0*	*2.7*	*1.2*	*4.3*	*4.0*
Uganda [b]	*17.9*	*10.2*	*37.1*	*22.4*	*4.0*	*2.3*	*8.3*	*5.1*
Republic of Viet-Nam (1959) [b]	*8.3*	*4.7*	*16.2*	*14.3*	*1.2*	*0.7*	*2.3*	*2.1*
Group 2								
Ceylon	*13.3* [i]		*33.3*	*27.6*	*3.7* [i]		*9.2*	*8.0*
Colombia (1957)	*(5.6)* [j]	*(3.5)*	*(14.0)*	*(9.4)*	*(0.5)* [j]	*(0.3)*	*(1.3)*	*(2.9)*
Ecuador	*(12.4)* [k]	*(3.7)*	*(21.3)*	*(10.9)*	*(1.4)* [k]	*(0.4)*	*(2.3)*	
Ghana (1959/60)	*13.9*	*6.2*	*28.4*	*17.7*	*2.5*	*1.1*	*5.0*	*6.7*
Honduras (1954/55)	*12.6*	*8.6*	*26.5*	*9.2*	*1.2*	*0.8*	*2.4*	*3.3*
Republic of Korea (1960) [b l]	*(16.2)* [m]	*(1.0)*	*(22.2)*	*(23.0)*	*(3.7)* [m]	*(0.2)*	*(5.1)*	*(4.8)*
Peru (1957)	12.9	3.5 [n]	23.3 [o]	18.6	2.4	0.6 [n]	4.3 [o]	
Philippines	*(23.8)*	*(6.7)*	*(33.1)*	*(10.4)*	*(2.5)*	*(0.7)*	*(3.4)*	*(3.5)*
Thailand (1960) [b l]	*17.4*	*3.0*	*25.8*	*16.8*	*2.9*	*0.5*	*4.3*	*3.5*
Group 3								
Chile (1956) [l]	*19.5*	*20.3*	*41.3*	*13.7*	*2.7*	*2.8*	*5.7*	*2.6*
Costa Rica	*24.2* [j]	*2.7*	*41.4*	*12.7*	*3.1* [j]	*0.3*	*5.3*	
El Salvador (1954)	*14.2*		*28.2*					
Federation of Malaya [b p]	17.4	7.4	27.2	20.1	3.5	1.5	5.5	3.5
Japan [l]	*(7.3)* [q]	*(2.2)*	*(30.0)*	*(21.1)*	*(1.5)* [q]	*(0.5)*	*(6.3)*	*(9.2)*
Mexico	*(11.1)*	*(4.4)*	*(19.3)*	*(10.1)*	*(1.1)*	*(0.4)*	*(1.9)*	
Portugal (1957)	*9.5* [j]	*6.2*	*23.9*	*14.2*	*1.3* [j]	*0.9*	*3.4*	
Singapore (1960) [l]	24.6	14.3	45.5					
Group 4								
Austria [r]	*(10.5)* [j]	*(0.5)* [s]	*(39.4)*	*(23.5)*	*(2.5)* [j]	*(0.1)* [s]	*(9.3)*	*(6.3)* [t]
Belgium [l]	*14.1* [j]		*30.7*	*18.3*	*2.6* [j]		*5.6*	*3.0*
Finland	*(14.3)* [m]	*(5.6)*	*(40.0)*	*(26.6)*	*(3.8)* [m]	*(1.5)*	*(10.6)*	
Federal Republic of Germany	9.6 [k]	1.3	47.9	24.4	2.3 [k]	0.3	11.7	3.6
Israel (1954/55)	10.0 [u]	5.6	32.3	39.5	3.9 [u]	2.2	12.8	14.9
Italy	*(12.3)*		*(24.6)*	*(21.2)*	*(2.6)*		*(5.2)*	
Netherlands [l]	*(13.0)* [j]		*(31.6)*	*(24.2)*	*(3.1)* [j]		*(7.6)*	*(3.8)*
Venezuela (1955/56)	*6.5*	*6.3*	*16.9*	*18.7*	*1.2*	*1.2*	*3.2*	
Group 5								
Australia (1954/55) [v]	7.2	7.6	41.8	27.0	2.0	2.1	11.3	7.2
Canada (1956)	10.7	5.0	32.7	25.6	2.7	1.3	8.4	
France	*8.9*		*31.9*	*25.2*	*2.2*		*8.0*	*5.3*
New Zealand	9.2	6.2	41.0	34.5	3.2	2.1	14.1	
Norway (1955/56) [v]	12.7 [k]	4.5	34.6	25.2	3.2 [k]	1.1	8.7	6.8
Sweden [w]	12.9 [n]	7.7 [x]	42.4 [o]	35.5	4.6 [n]	2.7 [x]	15.1 [o]	
United Kingdom [y]	13.2 [z]	10.4	48.1	31.4	4.1 [z]	3.2	15.1	5.1
United States of America	12.4	3.5	30.9	30.4	3.8	1.1	9.4	4.2
Median	12.8	5.3	30.9	21.2	2.7	1.1	5.6	4.4

these transfers do not form a part of national income or of GNP.[39] However, these percentages of GNP are practically very useful, especially as a safeguard against misinterpretations arising when government expenditures are considered in isolation.[40] Peru and Sweden are both shown in table 3 as having devoted 12.9 per cent of their government expenditures to education, but the demand thus made upon the national output was actually almost twice as great for Sweden as for Peru (4.6 per cent as against 2.4 per cent),[41] since government expenditures were equal to 35.5 per cent of GNP in the former case and only 18.6 per cent in the latter. Percentages of GNP have also the advantage that an economy as a whole tends to be more stable in size than a government budget;[42] thus, when using figures for a single year, there is less risk of obtaining an abnormal result with a percentage of GNP than with a percentage of total government expenditures.

Table 4 relates the social and cultural expenditures of the governments (classified functionally, and all levels of government combined) of countries with centrally planned economies in percentage terms both to their own total expenditures and to total expenditures on the countries' net material product. The former percentages, including the breakdowns for education and health, may in a general way be compared with those in table 3, although the concept of a budget changes to some extent when it carries the bulk of a nation's capital outlays, and although the specific differences in

[39] Such transfer payments might theoretically (assuming, e.g., large-scale land redistribution financed by payments to and from the Government) be larger than the national income itself. They are in any event important, and notably so in the social field. In the United States, social security payments, veterans' benefits, interest on the government debt and other transfers have accounted for one-sixth to one-third of total government expenditures in recent years; in the United Kingdom, transfer payments accounted for more than half of total government expenditures in 1933 and nearly two-fifths in 1955.

[40] On the other hand, the percentages of GNP, if considered in isolation, also could fail to bring out important information. They are the same for education in the Philippines and in Austria (in both of which, incidentally, the central government expenditures shown constitute an estimated 75-80 per cent of all government expenditures); however, the Government of the Philippines devotes more than twice as large a part of its own expenditures to education as does the Government of Austria (i.e., when figuring on a gross basis, as here, and ignoring the fact that the educational fees on the revenue side are probably larger in the Philippines, thus reducing the net difference). Obviously, also, a true picture of what a country as a whole is spending for education or some other purpose cannot be obtained by using GNP, unless private expenditures also are known and are included in the numerator of the fraction. (See discussion of private expenditures above.)

[41] This probably understates the difference in view of certain omissions from the published Swedish figures, see footnotes *n* and *x* of table 3.

[42] Although GNP may also fluctuate fairly widely, especially in economies heavily dependent on the export of one or two primary commodities.

FOOTNOTES TO TABLE 3

NOTE. Figures in italics represent expenditures of the central Government only, inclusive of grants and loans to other levels of government; parentheses are added if the central Government's total expenditures for all purposes, so calculated, are estimated to represent less than 85 per cent of the expenditures of all levels of government combined. Other figures represent government expenditures as a whole, i.e., all levels consolidated.

[a] Actual expenditures, i.e., final accounts, for 1958 or a fiscal year partly in 1958, except where otherwise indicated.

[b] Gross domestic product at market prices for Tanganyika and Thailand; net domestic product at factor cost for Kenya and Uganda. In the following cases the GNP (or GDP) data are for an earlier year than the budget data, which tends to inflate the percentages slightly: Nigeria, 1956/57; Republic of Viet-Nam, 1956; Republic of Korea, 1959; Thailand, 1959; Federation of Malaya, 1957.

[c] Includes — in general, but with some variation in detail from country to country — expenditures for items listed as social services in *A Manual for Economic and Functional Classification of Government Transactions*, i.e., education; health; "social security and special services" (including war veteran benefits, child and mother care and various other welfare institutions); and "other social services" (including housing, recreation, religion, etc.). Labour frequently appears as an item, often bracketed with welfare or social welfare.

[d] Includes — in general, but with considerable variation in detail from country to country — the economic services items listed in the *Manual*, i.e., agriculture and non-mineral resources; fuel and power; other mineral resources, manufacturing and construction; transport, storage and communications (including, as suggested in recent expert discussions, all roads and highways, frequently a large item); and "other economic services" (including research, commerce, etc.). "Economic development" appears in certain cases as a main component part.

[e] Partly budget estimates. In the case of Belgian Congo, an unknown amount of debt amortization is included in the Government total.

[f] Excludes minor amounts of social service expenditure by boards and corporations, e.g., pension payments.

[g] Includes Union and state government budgets (1957/58 accounts) but omits local expenditures, which in the previously cited "Exploratory Study" for 1954/55 accounted for 6.6 per cent of the all-level aggregate for social services. GNP roughly estimated. Government expenditures from preliminary draft of *Economic-Functional Classification of Central and State Government Budgets — 1957-58*, a study to be released by the National Council of Applied Economic Research, New Delhi, in 1961.

[h] Based on unofficial data.

[i] Based on education expenditure estimate from UNESCO.

[j] Education and culture.

[k] Education, culture and research.

[l] Budget estimates.

[m] Education and research.

[n] Expenditures for goods and services only.

[o] Includes estimated transfers.

[p] Partly estimated, with municipal expenditures and local education expenditures not included.

[q] Central Government expenditure for education here constitutes slightly more than one-third of the total for all levels of government combined, according to UNESCO data (see table 6).

[r] Based on expenditures excluding transfers of shared taxes to regional and local authorities.

[s] Not including extensive financing of social insurance expenditures (sickness and maternity benefits) outside the budget.

[t] Includes deficit of government enterprises, especially railroads, arising from extraordinary pension liabilities, accounting for nearly three-tenths of the total.

[u] Education, religion and research.

[v] Government expenditures on a net basis, after deduction of fees and other charges for goods and services.

[w] Rough estimates of unduplicated central-local totals.

[x] Government consumption only.

[y] Totals exclude debt interest but include net lending to public corporations.

[z] Education and child care, including school meals, etc.

the treatment of social items are considerable.[43] On the other hand, the concept of material product, employed by the centrally planned countries, differs sufficiently from the concept of GNP (see explanation in table) so that direct comparison between percentages of the one and of the other would not be justified.

The information conveyed by the tables may be summarized briefly: the government expenditure on education [44] recorded in table 3 ranges from 5.6 per cent to 24.6 per cent of total government expenditures,[45] with a median figure of 12.8 per cent, and from 0.5 per cent to 4.6 per cent of GNP, with a median of 2.7 per cent. (As the ratio between these two medians would imply, the median for total government expenditure itself in relation to GNP lies slightly above 20 per cent.) The corresponding expenditure on health,[46] for the somewhat smaller number of Governments reporting this as a separate item, is considerably lower, ranging from 0.5 per cent to 20.3 per cent of total government expenditure in exceptional cases,[47] and more generally from about 2 to about 10 per cent, with a median of 5.3 per cent, and from 0.1 per cent to 3.2 per cent of GNP, with a median of 1.1 per cent. Among the countries with centrally planned economies in table 4, the percentages of government expenditure found in the social categories show less variation but tend toward much the same levels — an average and a median around 10 per cent for education (slightly lower than in table 3), and around 6 per cent for health (slightly higher).

The expenditure on social items in the aggregate [48] — adding to education and health such further fields as social security, special welfare programmes, housing [49] etc. — ranges from 14.0 per cent to 48.1 per cent of total government expenditure, with a median of 30.9

[43] For example, in table 4 the component under the education heading includes government information programmes and basic scientific research; the health component also is broadly defined; and the social aggregate in all cases but one includes all social insurance benefits (which are partly, in varying degrees, excluded from the table 3 data). On the other hand, expenditures for housing are omitted for two countries in table 4.

[44] Some government accounts refer to a wider field such as education and culture, or education and research; in certain other cases, similar supplements may have been included without explicit mention.

[45] Break-downs of government educational expenditures by type are given by UNESCO for a number of Asian countries and for dependent territories of Africa, as follows (percentages):

	Primary	*Secondary*	*Vocational*	*Teacher training*	*Higher*
Afghanistan (1958-59)	29				
Burma (1957-58)	56				
Cambodia (1959)	68				
Federation of Malaya (1958-59)	60				
India (1956/57) [a]	34				
Indonesia (1958-59)	47				
Iran (1959-60)	38				
Korea, Republic of (1959)	87				
Laos (1959-60)	70				
Nepal (1959-60)	28				
Pakistan (1957-58)	38				
Philippines (1958-59)	90				
Thailand (1959)	43				
Viet-Nam, Republic of (1959)	35				
United Kingdom territories [b]					
Basutoland (1954)	65	2	9	7	2
Bechuanaland	71	8	1	4	
Gambia (1956)	69	25			6
Gold Coast (1954-55)	34	19	2	14	20
Kenya (1955-56)	61	21	5	8	
Northern Rhodesia (1955-56) [c]	76	4	5	5	
Nyasaland (1954/55)	68	8	5	11	
Sierra Leone (1956)	34	18	6	7	15
Somaliland (1956)	67	11	8	3	
Swaziland (1956)	57	18	8		
Uganda (1956)	58	27	0.4	8	
Zanzibar and Pemba (1956)	62	14	9	5	
British Colonial Development and Welfare Funds (April 1946-March 1958) [d]	57		29		14
FIDES [e] funds (1953-57):					
French Equatorial Africa	42	38	10	6	
French West Africa	41	21	3	21	10
Madagascar	16	33	45		5
Belgian Congo (1955) [f]	35		40	25	

Source: Asian data from UNESCO, Supporting Document to the Working Paper for the Regional Meeting of Representatives of Asian Member States on Primary Education, Karachi, 28 December 1959 - 9 January 1960, p. 103. Data relating to African dependencies taken or computed from report prepared by UNESCO for *Progress achieved by the Non-Self-Governing Territories in Pursuance of Chapter XI of the Charter: Education in the Non-Self-Governing Territories*, A/4131, except that figures on Colonial Development and Welfare Funds are computed from United Nations, *Economic Survey of Africa since 1950* (Sales No. 1959.II.K.1), pp. 231-232.

[a] Central Government plus states. (For all sources combined, including local government and private, expenditure on primary education is given as 28 per cent of total education expenditure).

[b] Recurrent expenditure only (including central administration).

[c] African education.

[d] Total issues to administering authorities in Africa.

[e] *Fonds d'investissement pour le développement économique et social.*

[f] Capital projects only: construction and equipment of schools by the Native Welfare Fund.

[46] In a few cases, the health figures include sanitation, which most accounts only include in the total social column or classify under some other heading.

[47] The extreme differences are partly the result of health insurance systems and variations in accounting practices relating to such systems. This subject is discussed below.

[48] These aggregates, as well as the economic aggregates, may be substantially affected by differences in classification. See foot-note *c* of table 3.

[49] Government housing expenditure (representing mainly public construction plus subsidies in one form or another to private construction) is sometimes reported as a separate item. Columns (1) and (2) below show this as a percentage of total government expenditure and of GNP, respectively. Column (3) repeats information given in table 1 on gross (public plus private) domestic capital formation as 1954-58 average per cent of GNP.

	(1)	*(2)*	*(3)*
Belgian Congo	*2.6*	*0.8*	
Burma (capital expenditures)	*0.2*	*0.1*	
India	0.9	0.1	
Ceylon (capital expenditures)	*2.1*	*0.6*	
Chile	*1.5*	*0.2*	
Austria	*(2.1)*	*(0.5)*	4.4
Belgium	*1.6*	*0.3*	4.4
Federal Republic of Germany	7.4	1.8	
Netherlands	*(9.9)*	*(2.4)*	4.5
Venezuela	*1.8*	*0.3*	
Australia	5.0	1.4	
France	*7.0*	*1.8*	4.5
United Kingdom	5.2	1.6	3.0

Table 4. — ESTIMATED STATE SOCIAL AND CULTURAL EXPENDITURES IN EIGHT COUNTRIES WITH CENTRALLY PLANNED ECONOMIES, IN TERMS OF PERCENTAGE OF TOTAL STATE EXPENDITURES AND OF NET MATERIAL PRODUCT [a] ABOUT 1958

	Percentage of state expenditures			*State expenditures as percentage of net material product* [a]	
	Social and cultural	*Education, science, culture*	*Health, physical culture*	*Total*	*Social and cultural*
Albania (1957) ..	19.3 [b]	9.6 [c]	6.0 [c]		
Bulgaria (1957) ..	24.3	8.7 [c]	3.6 [c]	58.9	14.3
Czechoslovakia [d] ..	42.7	10.3	5.5 [e]		
Hungary (1957) ..	28.5	9.6 [c]	6.5 [c]	48.5	13.8
Poland	33.1	10.8 [f]	7.6 [f]	52.3	17.3
Romania (1957) ..	26.3	7.9 [c]	5.3 [c]		
USSR	39.0	13.4	6.4	51.3	20.0
Yugoslavia	20.4 [b g]	11.2	7.2	27.0 [g]	5.5 [g]

[a] Material product is defined as the total value of goods and productive services, including turnover (indirect), taxes, produced by the economy in the course of the year. Agriculture, mining, manufacturing, construction, transportation and communication, trade and catering are included, but activities not contributing directly to material production, such as public administration and defence, personal and professional services (for example, education and health) and similar activities, are not included. Material product is thus not comparable in concept and coverage with national income or GNP as employed in the United Nations system of national accounts. Pricing policies, moreover, affect the relationships among countries and among components; this applies in regard to components of state expenditures also.

[b] Excludes housing. Totals for other countries include a housing component, partly estimated in some cases.

[c] 1959 plan.

[d] Budget estimates, 1958.

[e] Provincial, county and local government only.

[f] 1958 plan; percentage of current expenditure.

[g] Because of institutional differences, data for Yugoslavia are not directly comparable with those of other countries shown in the table. The share of revenue of the socialized sector which is distributed through the budget is much smaller in Yugoslavia, especially as regards (*a*) investment and (*b*) expenditures on social and cultural services. In other countries with centrally planned economies, social and cultural services are almost entirely financed through the budget (for example, all social security and social insurance expenditures are included in the budget) whereas in Yugoslavia in 1958 slightly more than four-fifths of all outlays in this field, inclusive of housing investment (or more than two-thirds, apart from social insurance) were financed outside the budget. Total outlays for social and cultural purposes in Yugoslavia thus were equal to nearly 30 per cent of net material product.

per cent, and from 19.3 per cent to 42.7 per cent in table 4, with a median of 27.4 per cent and an unweighted average of 29.2 per cent. In relation to GNP, social expenditure as a whole varies in table 3 all the way from 1.3 per cent to 15.1 per cent, with a median of 5.6 per cent. (The upper quartile, or mid-point for the countries *above* this general median, is 9.3 per cent of GNP.) The economic items, where the classification scheme in use permits them to be identified and aggregated,[50] range from 2.1 per cent to 14.9 per cent of GNP, with a median of 4.4 per cent.

Thus, as far as the items classed as social are concerned, when government accounts are examined in detail with a view to identifying all sums spent for those purposes, the totals are found to be fairly large — considerably larger than what the conventional budget classifications, agency by agency, seem to show. There are, naturally, wide variations from country to country, but the median for the main group of countries shown is slightly below one-third of all government expenditures (it is a little less, on the basis of somewhat different coverage, in the centrally planned economies) and between 5 and 6 per cent of GNP. Since these conclusions are based on data which in most cases take no account of government expenditures financed at state and local levels, where the totals may be less but the social emphasis is typically heavy, they may somewhat understate the attention that social items are actually receiving, especially in relation to GNP.[51] Education, largest of the social expenditure items, tends to account for two-fifths of the social total. Health expenditures of government are less than half as large on the average in the forty-one countries [52] and about 60 per cent as large on the average in the figures for the countries with centrally planned economies.

As has already been emphasized, the interpretation of the inter-country differences shown in table 3 is complicated by the incompleteness of the data wherever

[50] See footnote *d* of table 3.

[51] However, as is pointed out below, an opposite inference might be drawn when it comes to comparing the social items with the economic items.

[52] See table 1, where fragmentary information on private health expenditures is given.

only the central Government is covered,[53] and by other statistical discrepancies.[54] However, the Governments whose taxes and expenditures put a substantial part of the GNP through the budget, and those that spend substantially for social purposes, tend to be, understandably, the same ones. For example, those exceeding the median of 21.2 per cent in column 4 have social expenditures that average 9.7 per cent of their GNP — well above that median, which column 7 shows to be 5.6 per cent — while those found below the median of 21.2 per cent have social expenditures that average only 4.1 per cent of their GNP. Further, government social expenditure expressed as a percentage of GNP tends to vary directly with per capita income; and this again is not unrelated to the fact that, except for certain large exporters of primary products, few of the poorer countries have highly developed systems for raising revenue. For social items as a whole, this percentage averages 3.3 for the three independent countries in the group with annual income below $100 per capita,[55] in the next group it averages 4.1; in the next, 4,7; then 8.2; and finally, in the income group above $900, 11.3. For education, the corresponding sequence of average percentages, going up the income ladder, is 1.8, 2.3, 2.2, 2.7 and 3.2; for health, it is 0.7, 0.6, 1.1, 1.1 and 1.9. Social expenditure of Governments as a share of their own total expenditure shows a similar progression for social items as a whole — steadily upward from 15.2 per cent in the lowest income group, counting independent countries only, to 37.9 per cent in the highest group. For education and health, however, the average percentage rises only up to the third income group, and the figures above that point are lower, owing to the effect of other expenditures coming in.

The effect of social insurance systems on the percentages calls for comment. While many traditional societies provide social security by means of the extended family system, this task becomes increasingly monetized,[56] and devolves in substantial degree upon the State, as urbanization [57] and other forms of development proceed. At higher income levels, the expenditure for education and health comes to represent a smaller share of government social expenditure as a whole. This is due partly to an elaboration of governmental welfare provisions not organized on an insurance basis, and partly to social insurance systems as such with their large transfer payments. The total volume of social insurance payments can be very substantial. For example, cash benefits paid out under various social security schemes in or shortly before 1957, as reported by the International Labour Office, were equal in total to between 7 and 8 per cent of GNP in Austria and the Federal Republic of Germany, about 6.5 per cent in Sweden, nearly 6 per cent in Belgium and New Zealand, more than 5 per cent in Italy, and nearly 4.5 per cent in France. In Yugoslavia they equalled almost 6 per cent of the net material product; in Poland almost 5 per cent.[58] However, comparative evaluation of the influence of social insurance systems on the results obtained in tables 3 and 4 would require going behind the published information, since the accounting methods followed differ from country to country and even from one type of social insurance (e.g., health insurance) to another type (e.g., old age or unemployment insurance) within the same country. In particular, where social insurance funds are integrated with the budget, government accounts will show much larger payments than where the funds are independent and only the Government's transfers to them are reflected.[59]

For example, the social expenditures recorded in table 3 for the Federal Republic of Germany and New Zealand would be still larger if all payments to social insurance beneficiaries were shown, instead of only the

[53] For example, the virtually complete coverage of the government sector in the highest income group undoubtedly helps to account for the high percentages found among those countries, referred to in the text below.

[54] Such as the need in some instances to use untested recent budget estimates in order to obtain reclassified budget data, or the need to go back to earlier years for such data or for information on GNP.

[55] The average for the group as a whole, however, adding in the dependent territories, is considerably higher — 5.3 per cent. The averages shown for these dependent territories — 6.5 per cent of GNP and, more particularly, 32.1 per cent of total government expenditures — may be compared with an average 17.4 per cent of total government expenditures for *current* expenditures on social services in eleven other African dependencies in 1956, according to the United Nations study, *Progress achieved by the Non-Self-Governing Territories in Pursuance of Chapter XI of the Charter: Public Finance* (A/4178). This would be roughly equivalent to 22 per cent altogether, assuming capital expenditure ratios similar to those shown in table 5.

[56] Here again is illustrated the fact that expenditure statistics (and, especially, government expenditure statistics in isolation) can only partially measure social provisions, and that, in certain respects, they do less than justice to the conditions prevailing in less developed countries as compared with those in the more developed countries. On the other hand, pay scales in the public service are often higher in relation to average income, in less developed countries, in which case the expenditure statistics do tend to give a relatively exaggerated impression of the social services rendered. (Martin & Lewis, op. cit., pp. 208 and 211.)

[57] The trend is not strictly limited to urban, industrial societies but appears also in certain agricultural areas under a plantation system, examples being provided by the employees' provident funds in the Federation of Malaya and in Ceylon.

[58] Data on annual receipts and expenditures of social security systems, excluding pension plans for civil servants and certain other social security funds, are given in the ILO *Year Book of Labour Statistics* for 1958. See also ILO, *The Cost of Social Security*, op. cit., for extensive information up to the year 1954. Tables of international comparisons show the percentages of national income represented by all benefits (in kind as well as cash) paid out under social security schemes, and the fraction of the whole represented by social insurance and family allowance schemes as such. Individual country tables show state participation and the participation of other public authorities in providing the receipts of the social security system and of its main components. For the levels of government included in table 3, above, the State or other public contribution in 1954 varied from about 10 per cent of total receipts of the social security system in France and Portugal, and about 25 per cent in Austria, Italy and the Netherlands, up to 70-80 per cent in Australia, Belgium and Sweden.

[59] In the one case, the figures ignore the offsetting transfers from employers and workers who pay social security taxes; in the other case, such offsetting transfers are, in effect, netted out.

Governments' own outlays from general taxation. Again, the figures for Chile include only an undisclosed amount of government contribution to social security funds, although other sources indicate that the total expenditures of social security agencies amounted in 1953 to roughly one-third of all outlays of the public sector as a whole. On the other hand, in the case of the United Kingdom, and some other countries, a much larger part of the total paid to insurance beneficiaries is included in the figures; without these benefits, the United Kingdom's 48.1 per cent of total government expenditures would be 35.2 per cent. In the Soviet Union, social security expenditures of various types appear to account for about 14 out of 39 per cent of State expenditures allocated to social and cultural fields (table 4). At a lower income level, Costa Rica's 41.4 per cent of government expenditures for social purposes includes 14.5 per cent of contributions to independent social security funds and government employee pensions, together with 26.9 per cent of other items.

The relations between social and economic expenditures are of considerable interest. In the first place, table 3 confirms that these two kinds of government expenditure tend to be directly rather than inversely correlated. The Governments of certain less developed countries, notably Ghana and India, are seen to be much higher in the ranking on the economic side than on the social side, and the reverse is rather strikingly apparent in the case of the Governments of some highly developed countries such as the Federal Republic of Germany, United Kingdom and United States of America. However, of the twenty-seven countries for which figures appear in both of the last two columns, six in the top nine for economic expenditures are also in the top nine, and seven are above the median, for social expenditures; while six in the bottom nine for economic expenditures are also in the bottom nine, seven are below the median and one is at the median, for social expenditures. In the second place, table 3 also shows that most Governments spend more on social items than on economic items, assuming that both broad areas are defined as recommended by the United Nations.

This conclusion depends, however, not only on how certain borderline areas are demarcated, but also on differences in accounting practice as between government departments and government enterprises. The social activities of Governments are mostly in the departments themselves, where it is customary to record expenditures on a gross basis. On the other hand, some of the important economic activities that Governments may or regularly do undertake (railways, postal and telegraph systems, etc.) are commonly run by government enterprises rather than by departments, and usually it is only the investment together with the net profit or loss that appears in the budget or the consolidated government accounts. This is particularly the case if the accounts have been reclassified according to the United Nations classification, which emphasizes the important distinction between activities relating to general government functions as such and those involving production and sale to meet the market demand. Table 3 thus tends to exaggerate the Government's social role in relation to its economic role, broadly conceived (even though, as stated above, the government social expenditures tend to be understated). How great the relative exaggeration is would be difficult to judge without a more precise clarification of the concepts associated with the question under examination and a detailed examination of individual government and (wider) public sector accounts.

The relation of social outlays to outlays for defence is naturally also of interest. Obviously the absence of a heavy defence burden provides countries with an opportunity to devote larger resources to economic and social development, and some countries (Ceylon, Costa Rica and Finland, for example) have made good use of that opportunity. Other factors enter in, however, especially the scale on which the Government participates in the economy, as measured by the size of its total revenues and total expenditures. A number of Governments incur large expenditures both for defence and for social programmes, while some others spend only moderate sums for either.

Quantitative comparisons are particularly unreliable in the defence expenditure field, partly because undue weight is given to defence in those cases where only central government figures are available, and partly because it is inherently difficult in some situations to distinguish between external defence and the maintenance of internal law and order, and for this and other reasons a portion of what is shown under defence in some countries may elsewhere be classified under other headings. Two things can be said in a general way about the published figures, taken at their face value. First, the median figure for defence expenditures in the independent countries grouped in table 3 is about 2.8 per cent of GNP. Second, no inverse correlation can be shown between the expenditures of these Governments on defence and on social items, in terms of percentage of GNP.[60]

Some further lines of analysis

Capital outlays: Table 5 gives an approximate idea of the extent to which social and economic expenditures of Governments represent capital outlays rather than ordinary payments on current account. By capital outlays are meant, in this context, not merely the expenditures that the Government itself devotes to capital formation directly, but also the government loans and advances intended to lead to capital formation by the recipient.[61]

Concepts and measurements of "capital" vary

[60] The coefficient of correlation is plus 0.35.

[61] Purely financial capital transactions (e.g., debt retirement or purchases of other financial assets) have, as far as possible, been excluded both from capital expenditures and from total expenditures in computing percentages for this and earlier tables.

Table 5. — ESTIMATED SHARE OF GOVERNMENT EXPENDITURES ALLOCATED TO CAPITAL OUTLAYS IN SOCIAL AND ECONOMIC FIELDS, ABOUT 1958

Income group	Capital as percentage of current plus capital					Economic capital as percentage of social plus economic capital
	Total	Education	Health	Social [a]	Economic	
Group 1						
Burma	*27*	*4*	*10*	*14*		
India	42	8	30	20	78	91
Kenya (1958/59) [b]	*17*	*8*	*6*	*26*	*33*	*48*
Nigeria (1957/58)	26			15	48	72
Uganda [c]	*26*	*12*	*13*	*22*	*48*	*61*
Viet-Nam, Republic of (1959) [d]	*9*	*10*	*14*	*12*	*31*	*69*
Group 2						
Ceylon	*28*			*16*	*67*	*79*
Colombia (1957)	*(33)*				*(79)*	
Ecuador (1957)	*(14)*	*(6)*	*(0)*	*(3)*	*(62)*	*(95)*
Honduras (1954/55) [e]	*25*	*8*	*14*	*20*	*48*	*76*
Korea, Republic of (1960)		*(18)*	*(26)*	*(22)*	*(80)*	*(78)*
Peru (1957)	28	3 [f]	44 [f]			
Philippines	*(22)*	*(7)*	*(21)*	*(11)*	*(53)*	*(84)*
Thailand	*14*	*7*	*9*	*9*	*55*	*83*
Group 3						
Chile (1956)	*17*	*4*	*8*	*9*	*55*	*73*
Federation of Malaya	21	11	11	11	54	76
Japan	*(47)*	*(19)*	*(55)*	*(27)*	*(84)*	*(82)*
Portugal	*30*	*14*	*12*	*9*		
Singapore (1960)	11	9	0.1	5	3	16
Group 4						
Austria	*(25)*	*(8)*	*(6)*	*(8)*	*(56)*	*(82)*
Belgium	*9*	*4*		*3*	*45*	*89*
Finland	*(29)*	*(14)*	*(14)*	*(14)*		
Germany, Federal Republic of [d]		9	11	18	43	41
Israel (1954/55)	49	12	13	39	90	73
Netherlands	*(12)*	*(4)*		*(21)*	*(30)*	*(41)*
Venezuela (1955/56)	*46*	*20*	*19*	*25*		
Group 5						
Australia (1954/55)	34	19	16	25	89	70
France	*21*	*21*		*23*	*45*	*56*
United Kingdom	20	15	4	12	65	63
United States of America	23	21	10	11	42	63
Median	25	9	12.5	14	54	74

NOTE. The general note and relevant footnotes to table 3 apply here as well, and should be consulted.

[a] Includes education and health as well as other social items.

[b] Percentages refer to " development " expenditure and " colony " expenditure.

[c] Percentages refer to non-recurrent and recurrent expenditure.

[d] Because of unclassified expenditure components, current and capital expenditures do not add to total.

[e] Capital expenditure for goods and services only.

[f] Expenditures for goods and services only.

widely,[62] so that the risks of inter-country comparisons are even greater than for the preceding tables.[63] However, the comparison between the economic and social items in this table is of considerable interest. Whereas the figures in the columns for capital outlay as a share of total outlay on education, health and social items as a whole all have medians below 15 per cent,[64] the corresponding median for the aggregated economic items is above 50 per cent. This striking difference depends in part on an accounting principle referred to earlier, under which the current transactions of public enterprises (which naturally fall in the economic column) are customarily entered in the accounts on a net basis. It is also a fact, however, as the last column of the table shows, that Governments make larger capital outlays for economic items such as highways and power plants than for social items such as schools and hospitals. The economic capital aggregates tend to account for some three-fourths of the total for the aggregates combined.[65] This is not surprising in view of the financial and other implications for the future under alternative budgetary and investment patterns. The physical assets created will have to be maintained, whether they are social or economic. The economic items are, however, more likely to contribute profit or tax revenue toward their own maintenance than the social items. Moreover, Governments in under-developed countries have become rather acutely aware that the essentials for growth include expensive transport, power and irrigation facilities. In addition, it is the social items that present the more serious servicing problems — not merely the paying but the training of teachers and doctors to man tomorrow the schools and hospitals that are built today.

But it would be wrong to see this preponderance of economic capital expenditures as evidence of imbalance between the economic and social fields. Capital expenditures are, of course, highly important as a basis for development or growth, but capital expenditure is not the same thing as developmental expenditure, or as investment in the broad sense. In particular, much of the social expenditure that is recurrent, and is normally entered in the current account, is nevertheless developmental and represents an investment — *in* people. In any properly functioning educational system, not only the funds used to build schools (and teacher-training institutes) but also the salaries paid to teachers (and, of course, to the teachers of teachers) constitute such an investment.

Absolute levels of expenditure: Whereas only ratios have been considered up to this point, table 6 throws light on the absolute size of certain social outlays. Data underlying previous tables have been used to obtain estimated dollar amounts *per capita* spent by Governments for education,[66] and spent by society as a whole for capital formation in the housing field, in or around 1958. Corresponding estimates have not been included for health or for social purposes as a whole.

Two points should here again be stressed, as a safeguard against misinterpretation. First, this summation gives only a partial view of what the countries concerned are spending for education or housing. Private educational expenditures are not included, and in most cases the government expenditures shown are only (for lack of other data) those financed at the central government level. The housing expenditure figures take no account of rent and other non-capital payments. These limitations, coupled with differences in statistical coverage and method to which reference has been made in previous sections, and with the further difficulty of estimating dollar equivalents for other national currencies, seriously restrict the uses of the table for inter-country expenditure comparisons. Second, comparisons between expenditures by no means always tell us how the services rendered compare; one country may be getting considerably more for its education dollar, or even its housing dollar, than another country.

The table does nevertheless serve as a reminder of the great gap between what the poorer countries spend for social purposes, per head of population, and what the richer countries can and do afford.[67] Group averages for the figures in the education column go steadily up

[62] Statistics frequently fail to include major repairs and alterations together with new construction, or fail to distinguish between newly created assets and assets purchased from others. Sometimes non-revenue-producing investments (e.g., in roads) are included in the revenue account of a budget which has not undergone economic reclassification. In addition, capital formation is a process in which budget accounts often show the cash expenditure in one time-period although the actual asset creation takes place in another.

[63] A figure for a single year may also give an unrepresentative picture because of the " lumpy " way in which capital expenditure tends to occur.

[64] The fact that the median is higher for health than for education reflects the weight of teachers' salaries in education expenditure, while the public housing outlays included in the social total probably explain why the median for this aggregate is slightly above the other two. In connexion with the median education capital ratio shown (9 per cent), the " Karachi plan " visualizes the following breakdown for *primary* education in the Asia region for the period 1960-1980: non-recurring expenditure (i.e., school buildings plus teachers' quarters, furniture, equipment and teaching aids), 15 per cent; recurring expenditure, 85 per cent — made up of direct recurring expenditure (mainly teachers' pay), 75 per cent, and indirect recurring expenditure (teacher training, plus direction and inspection), 12 per cent. (*Report of the Regional Meeting of Representatives of Asian Member States on Primary and Compulsory Education*, Karachi, 28 December 1959 - 9 January 1960. Paris. UNESCO/ED/173, pp. 46-47.)

[65] See also *World Economic Survey* 1959, United Nations publication, Sales No.: 60.II.C.1), page 85, table 2-17, which gives a rough percentage distribution of public investment in seventeen less developed countries in Latin America, Africa, Asia and the Middle East during the decade of the 1950s. Allowing for gaps and classification problems, the columns for transport and communication, agriculture, and industry appear to average about two-thirds of the total, as against less than 12 per cent for health and education, with the balance made up mainly of construction (specifically including education and health in several cases) plus some municipal and local development, and " others ".

[66] Recent estimates for eighty-nine countries, which have been drawn on in some cases to complete this table, are given in UNESCO's *International Yearbook of Education*, vol. XXI, 1959, pp. 548-550.

[67] The gap will be still wider if measured per head of *school-age* population, although narrower if measured per child actually in school.

from about $2.25 (or, speaking of the independent countries in the group, a little above $1.25) where per capita annual income is estimated to be less than $100, to $3.75 where it is between $100 and $200, $8.25 where it is between $200 and $500, $24 where it is between $500 and $900, and $57.00 where it is above $900.[68] Also notable are certain figures, such as those for Ghana, Japan and Singapore, which stand well above those in most countries of roughly similar development as measured by income. In the figures for gross domestic capital formation in dwellings — which in all but four cases exceed the figures for government expenditure on education — a rapid progression up the income scale is again apparent. Undoubtedly the dearth of data from the lower income countries in this column is partly a reflection of the previously emphasized fact that much of their housing construction takes place on a direct or non-monetized basis.

The choice of exchange rates for translating expenditures in the countries with centrally planned economies into dollars presents intractable problems. No one rate is necessarily more valid than other rates that might be selected. If the official tourist rate is used, then per capita expenditures for education, science and culture amounted to about $21.50 in Hungary's 1959 plan, $23 in Poland's [1958] plan, and $41.50 in the Soviet Union in 1958. Expenditures for state housing investment on the same basis amounted approximately to $9.50 in Hungary, $12.50 in Poland (the socialized sector) and $17.50 in the Soviet Union (housing investment excluding private investment and investment with special funds of enterprises).

Trends. The long-term trend of social expenditure has been strongly upward, in relative as well as absolute amounts. This is partly explainable on the ground that, as nations become richer, they are able to make proportionately larger collective provisions for social needs. Historically also the great change of opinion in the world since the nineteenth century — the awakening of social conscience and decline of *laissez faire* — has provided motivation for the expansion of social outlays, quite apart from considerations of capability based on wealth.[69] Meanwhile, the growing role of Governments, signalized by the growing percentages of national resources channelled through government budgets, has provided the needed mechanism.

Suitable time series extending far back into the past

[68] As noted in the previous discussion of table 3, government social expenditure as per cent of GNP tends to vary directly with per capita income; consequently the absolute expenditures in these social fields typically differ more than the corresponding income levels.

[69] "The ratios in the less developed countries ... at least in some cases ... surpass the ratios in the [developed] countries at comparable historical stages of economic developemnt. In fact, public expenditures for education alone have reached or exceeded 3 per cent of national income in Ceylon, Egypt, the Philippines and Turkey — a figure which surpasses or at least equals the ratio of *total* social expenditures to national income in Great Britain and Northern European countries at the turn of the century." *International Survey of Programmes of Social Development*, op. cit., p. 187.

Table 6. — APPROXIMATE DOLLAR EQUIVALENT OF ANNUAL PER CAPITA EXPENDITURES IN SELECTED SOCIAL FIELDS, ABOUT 1958

Income group	*Government expenditures for education*	*Gross domestic capital formation in dwellings*
Group 1		
Belgian Congo	*3.50*	
Burma	*1.75*	
India	1.25	
Kenya	*3.75*	
Tanganyika	*2.00*	4.00
Uganda	*2.75*	
Viet-Nam, Republic of	*1.00*	
Group 2		
Ceylon	5.00	
Colombia	*(1.00)*	
Ecuador	*(2.50)*	4.00
Ghana	*6.75*	
Honduras	*2.50*	7.25
Korea, Republic of	*(5.00)*	2.50
Peru	5.00	
Philippines	*(2.75)*	1.50
Thailand	*3.00*	
Group 3		
Chile	*8.00*	
Costa Rica	*9.50*	
El Salvador	*4.75*	
Federation of Malaya	9.50	
Japan	14.00	7.25
Mexico	*(3.50)*	
Portugal	*3.25*	8.00
Singapore	13.00	
Group 4		
Austria	*(20.00)*	37.25
Belgium	28.25	51.75
Finland	*(27.75)*	
Germany, Federal Republic of	24.25	
Israel	22.75	59.50
Italy	*(19.75)*	46.00
Netherlands	*(31.00)*	49.00
Venezuela	*18.75*	
Group 5		
Australia	27.25	
Canada	56.50	111.50
France	*27.25*	56.25
New Zealand	60.50	95.50
Norway	53.00	64.50
Sweden	64.75	76.00
United Kingdom	70.00	43.50
United States of America	96.25	112.75

NOTE. Figures are based on estimated parities and are rounded to the nearest quarter-dollar. For education, the national data underlying table 3 are drawn upon (see general and detailed notes to that table for inter-country differences in coverage etc.) except that more recent national data published by UNESCO are used for India, Honduras, Chile, El Salvador, Japan, Israel, Venezuela, Australia, Canada and Norway. The expenditures on housing construction are from national accounts for 1958 (except Honduras, 1957 and Israel, 1956) and are therefore not adjusted for cyclical fluctuations (see footnote 19); however, the data appear in the majority of cases to be within 5 per cent and in all cases within 15 per cent of the five-year averages used in table 1.

are not readily available, but certain examples of western experience may be cited. In the United Kingdom the share of total government expenditure commanded by social services rose fairly steadily from 21 per cent in 1890 to 33 per cent in 1913, dropped as a result of heavy military expenditures during the First World War, resumed its upward course to 47 per cent in 1931, and tended to level off thereafter; in relation to GNP, these government expenditures on social services climbed from 2 per cent in 1890 to 18 per cent in 1950.[70] In Sweden, governmental current expenditures in the social fields, not including education, rose from about 2 per cent of net national income in 1900 to 5 per cent at the end of the 1930's and 10 per cent by 1958.[71] In Canada, "The cost of public charities, welfare, and education in the four provinces of British North America in 1866 amounted to only 9 per cent of total government expenditures, a figure which may be contrasted with the 19 per cent allotted for social security payments in the 1950 federal budget, in addition to very large provincial and municipal expenditures for social welfare."[72] In the Soviet Union, official figures show a rise in social and cultural expenditures (calculated on a somewhat different basis; for example, basic scientific research is included in the same category with education) from 18 per cent of total budget expenditures at the beginning of the first five-year plan in 1928-29 to 33 per cent in 1958; inclusion of housing raises the latter figure to 39 per cent (as shown in table 4).

Since the end of the Second World War, the emphasis on social expenditures has often — though not always — again increased, with many new and less developed nations striving to overcome acute shortages of social facilities and services quickly, even without a prior rise in income. A comparative study of five northern countries in Europe shows that social expenditures and services as a percentage of national income rose between 1950 and 1955 in Denmark, Finland, Norway and Sweden, and declined only in Iceland (where the absolute per capita index of such expenditures and services nevertheless rose).[73] In Portugal, current expenditures of the national Government on education, claiming 11 per cent of total current expenditures in 1934-35 and 12 per cent in 1950, were slightly higher at 12.5 per cent by 1957; current expenditures on public health showed a more pronounced upward trend, with corresponding percentages of 4.1, 6.7 and 8.4.

Expenditures of national Governments for education increased as a percentage of their total expenditures in some — perhaps a majority — countries of Latin America. Based on data in reports from thirteen countries for 1953 or slightly earlier up to around 1958, these percentages rose for Costa Rica (already high to begin with), El Salvador, Mexico, Colombia and Peru; fluctuated in Argentina, Honduras, Chile, Haiti and Venezuela without much trend, although the tendency in the last three appeared to be upward in the latest budget estimates; and declined in Ecuador, Guatemala and (from a high level) Panama.[74] Allowance must here be made, however, for incidental changes caused by fluctuations in the government total (rather than in the education component itself), as well as for the possibility of statistical distortions due to partial discontinuities in some of the budget series. The same is true also in the case of the apparent trends in, for example, Asia and the Far East. Among the countries of this region that were already independent at the beginning of the decade, there seems to have been an upward movement of aggregate expenditure on social services as a percentage of central government expenditure in Burma, the Republic of Korea and Thailand; a slight decline in Indonesia; and no significant change in the high ratios already recorded in Ceylon, Japan and the Philippines, or in the ratio in India (data for education and health, in the states only)[75] or, at a lower level, for education and health in Pakistan. A rising trend was evident in the dependencies of North Borneo, Sarawak and (from an already high level) Singapore, with little change in Brunei according to the latest reported figures. Data for the Federation of Malaya and — largely on an estimated basis — for Cambodia, Laos and the Republic of Viet-Nam show advances to higher levels following their attainment of independence.

Whether a country can give increased attention to social expenditures after it gains independence will, of course, depend on the pre-existing situation, the strength of competing demands upon its new Government, the extent of foreign aid, and so on. Considerable information is available on the pre-existing situation. Ten of twelve British dependent territories in Africa (Bechuanaland, British Somaliland, Gambia, Gold Coast, Kenya, Nigeria, Northern Rhodesia, Sierra Leone, Swaziland and Uganda) showed a higher percentage of their budget spent on current education services in 1956 (when the average among them was 8.8 per cent) than in 1947; only Basutoland (at a high 17 per cent level in 1947) and Nyasaland had lower ratios. On the other hand, the

[70] Alan T. Peacock & Jack Wiseman, assisted by Jindrich Veverka, *The Growth of Public Expenditure in the United Kingdom*, National Bureau of Economic Research, Inc., New York. To be published in 1961 (GNP at factor cost; social services here include food subsidies, accounting for about 4 per cent of GNP in 1950).

[71] Or about 15 per cent including capital expenditures and the field of education. *International Survey of Programmes of Social Development*, op. cit., p. 187, footnote 12.

[72] Elisabeth Wallace, "The Origin of the Social Welfare State in Canada, 1867-1900", *The Canadian Journal of Economics and Political Science* (Toronto) vol. 16, No. 3, August 1950, p. 384.

[73] *Co-ordinated Statistics of Social Welfare in the Northern Countries* (Stockholm, 1957), pp. 41 and 43.

[74] As a percentage of GNP, however, the national government expenditures for education appear to have risen in the last three countries mentioned and also, at least slightly, in Honduras, Chile, Haiti and Venezuela from the preceding group. This contrast is not surprising in view of the more or less world-wide tendency for the government sector to expand in relation to the rest of the economy.

[75] A comparison of India's first and second five-year plans shows a decline in expenditure on social services from 22.6 per cent to 19.7 per cent of all expenditures under the plan, but a rise from 16.8 per cent to 17.8 per cent if the rehabilitation item is omitted. Education in these figures declines from 7.0 per cent to 6.4 per cent.

percentage spent on current health services was lower in 1956 than in 1947 in all except Bechuanaland, British Somaliland and Nigeria. Current expenditure on social services as a whole also tended to decline slightly, relative to total budget expenditures, during this ten-year period, the average figure being 22 per cent in 1947 and 19 per cent in 1956, with only British Somaliland, Nigeria and Swaziland registering increases.[76] In the Belgian Congo, 26 per cent of the ordinary budget was reported spent on social services in 1956, and 30 per cent in 1958, as against 15 per cent in 1948. (With the extraordinary budget added in, the percentages in recent years were about the same.) Total expenditures for education rose more rapidly than those for health. In the combined African territories under the administration of France, the current expenditures for education and health together constituted about 15 per cent of total expenditure in 1955, as against 12 per cent in 1950.

Records of experience following upon attainment of independence are still limited in extent. The Governments of newly independent countries have difficult choices to make. Under severe stress, some of them may find it necessary at first to curtail their social outlays in relation to outlays for law and order and for economic infrastructure investments.

Ceylon and, more recently, the Sudan apparently have maintained, or almost maintained, their pre-independence degree of emphasis on social expenditures; undoubtedly the relatively small size of their defence outlays has been helpful in this regard. After Burma became independent in 1948, social expenditures amounted to 8 or 9 per cent of the budget, as against a 1938/39 level of 19 per cent — gradually approached in recent years, but not yet fully regained. In Ghana, a previous down-trend in budgetary attention to social services was, shortly after independence, reversed. Mention has already been made of the Federation of Malaya where the percentages of the budget allocated to health and (especially) to education were pushed higher, in spite of costly emergency defence expenditure. The question is whether competing demands will permit the achieved levels to be maintained in these countries in the immediate future. A budget estimate for 1960/61 shows social expenditures of the Government of Ghana declining somewhat from their high level while defence expenditures and economic expenditures rise.

[76] A special study of Uganda shows, however, a considerable rise in this period, and also subsequently, in the percentage of total government expenditure devoted to recurrent and non-recurrent expenditure on social services ("Balanced Social and Economic Development in Uganda: A Case Study" (to be issued separately)).

The statistical needs

A recapitulation of the findings of this chapter would add little, and might rather subtract because a summary would omit some of the distinctions and qualifications required for an understanding of what the figures do and do not show. Three salient points may be singled our for repetition. First, a balanced national development, with social factors emphasized in due relation to economic factors, cannot be fully diagnosed by means of expenditure statistics or any other quantitative measurements — including pertinent revenue data, feasible estimates of the relative weight of "non-monetized" transactions in the economy, and the practical insights obtainable by "performance budgeting" techniques. Second, expenditure statistics are nevertheless a useful partial guide in this area. Third, the existing social expenditure statistics are relatively very inadequate.

Data for the private sector and for local governments are commonly lacking. Figures for the state or provincial governments in federal systems have seldom been consolidated with figures for the national government. National (and other) budgets, classified to begin with on an agency basis, usually still lack a supplementary functional classification — by purpose or field of expenditure. Additionally, for various detailed reasons international comparability is far from being achieved.

In the course of time these statistical weaknesses can be largely overcome, and a clearer picture of the facts can then emerge. For this to happen, a statistical attack along two lines is needed. First, the work of reclassifying budgets along economic and functional lines — which is now beginning to gain some momentum in various regions of the world, including Africa — needs to be pressed forward, with main emphasis on clarity and uniformity of treatment of individual component items rather than broad aggregative fields. This work can well continue to be based upon the United Nations publication, *A Manual for Economic and Functional Classification of Government Transactions*. Second, information is needed on national social expenditures as a whole, since evaluations resting on expenditures in the public sector alone are clearly one-sided. Here the problem for the present is still one of resolving conceptual difficulties, with a view to asking Governments to provide information on social expenditures within a broadened frame of reference integrated with *A System of National Accounts and Supporting Tables*.

Chapter V

THE CO-ORDINATION OF SOCIAL AND ECONOMIC DEVELOPMENT PLANNING AND PROGRAMMING[1]

Introduction

References to the close relationship between the goals of economic development and those of social development will be found in published policy statements of most Governments today, in both developed and underdeveloped countries. The purpose of economic development — defined as increase of per capita national income arising from increased production — is generally stated to be improvement of levels of living, although other considerations, such as increase of national strength and prestige, are usually involved as well either explicitly or implicitly.

Economic growth can bring benefits to the people among whom it occurs, and is clearly required for any substantial improvement in levels of living, but this effect is not an immediate and necessary one. Whether or not economic growth is beneficial, and how beneficial it is, depends on the way in which it comes about and on the directions that it takes — circumstances that are largely determined by the political, social and cultural framework within which it occurs. In other words, economic growth, if taking place under certain circumstances, creates opportunities for a better life and for social progress, but these opportunities must be seized. Similarly, social advance may contribute to economic growth, but not necessarily. To achieve maximum mutual advantage, social policy and economic policy must be adapted to each other. The purpose of this chapter is to consider ways in which the integration of economic and social policy has been attempted.

While it is generally agreed that economic development lays down the material basis for the improvement of the living standard and for the advancement of social activities, the means for achieving this purpose may or may not be incorporated, in terms of specific directives, in a development plan or programme. Some countries rely, to this end, on mechanisms outside the economic development programme — on the spread of employment and the higher wages made possible by economic growth and demanded by the workers, the allocation of larger resources to social programmes under the normal budget made possible by larger government revenues, etc. Most countries with development plans, however, incorporate specific social targets in their plans together with economic goals — usually targets related directly to the economic targets. This is true, for example, of the programme of "economic and social development" of the Philippines.[2] That country is also concerned about the relation of the development programme to existing institutional forms and cultural values. "The development process will be effected within the framework of existing culture patterns. Desirable changes in political and social institutions will be sought through education, demonstration and legislation when such [institutions] are inimical to the requirements of a rapid economic development. Under the Programme, however, care will be taken that public policy and action do not upset drastically the existing non-economic value patterns lest the social gains in economic terms will be negated by the costs in non-economic terms."[3]

The Government of the Soviet Union considers improvement of levels of living to be a necessary and inevitable consequence of economic growth when the latter occurs in a socialist society. "The material welfare of the Soviet people is inevitably improving on the basis of the general growth of the Socialist economy and of the increase in the productivity of labour.... The strengthening of the economic potential of the country, further technical progress in all the sectors of the national economy and the uninterrupted growth of the productivity of... labour will [therefore] result in a certain improvement of the people's level of living."[4]

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[1] The general approaches to social programming or social planning in the context of over-all national development of the economically developed countries of Western Europe, North America and Oceania; the countries with fully planned economies; and the economically less-developed countries, were described in some detail in the *International Survey of Programmes of Social Development* (United Nations publication, Sales No.: 55.IV.8), chap. XIII, and will therefore not be described again in the present report. Administrative problems linked to social development were discussed in chapter IX of the second *International Survey of Programmes of Social Development* (United Nations publication, Sales No.: 59.IV.2). Case studies of planning for balanced social and economic development in individual countries, issued separately, will provide further details.

[2] See National Economic Council of the Philippines, *The Five-Year Economic and Social Development Program for Financial Years 1957-1961*, Manila, 1957; and *ibid., Three-Year Program of Economic and Social Development (Financial Year 1959-60 to Financial Year 1961-62)*, Manila, 1959.

[3] *Three-Year Program of Economic and Social Development*, op. cit., p. 15.

[4] N. S. Krushchev, *The control figures concerning the development of the national economy of the U.S.S.R. for 1959-65*, an address at the 21st Congress of the Communist Party of the Soviet Union, Moscow, 1959, pp. 11 and 16.

"The Socialist state, by determining, through national economic plans, the production targets for consumers' goods and also for the capital goods needed for their production ... thus basing itself consciously on the [specific] economic laws of socialism, determines the level at which human needs are satisfied." [5]

Official statements emanating from a number of Governments point to the need for achieving balance in the public allocation of resources, as a means of ensuring that the opportunities created by economic growth will be properly realized. Thus, for example, the Government of the Federation of Malaya states that its policy is "to gear the proposed pace of the development of the social sector to the proposed rate of expansion of the economic sector",[6] and emphasizes the necessity to take into account the allocation of an adequate portion of the fruits of economic growth for the satisfaction of social needs. The President of Venezuela, in his message of 29 April 1960 to the Congress of his country, mentions the "generally accepted imperious necessity" of using the income produced in the oil and mining sectors of the country's economy for the purpose of strengthening the lagging sectors, since the "fundamental goal of welfare" can be achieved only in an economy with over-all strength.[7] The importance of giving economic growth a proper direction through balanced allocations, in order to create conditions under which it will result in an improvement in levels of living, has been defined as follows by Wladyslaw Gomulka, First Secretary of the Central Committee of the Polish United Workers' Party: "... it is of extreme importance ... to balance further investment allocations so as to obtain both a growth of those sectors of the national economy which require it and also the necessary improvement of the population's level of living".[8]

At the same time numerous government statements reflect an awareness of a danger of imbalance in the form of excessive social expenditures consuming resources that could be used to promote basic industrial growth, and some Governments in this connexion assert the need for giving "priority" to the economic sector. The Government of the Federation of Malaya "realizes that when financial and material resources are limited as they are in the Federation of Malaya, the effort to plan for a higher standard of living than might otherwise be attained demands restraint in current social expenditure and even some temporary sacrifice of progress in well-being".[9] Similarly, the Government of Pakistan states that "resources that can be devoted to this [i.e., the social] purpose are limited by the necessity to provide a solid basis of agricultural and industrial progress upon which further social gains will depend".[10] The Yugoslav Government states that, "priority has been given to economic development. The necessity of making the country economically independent and the subsequent rapid industrialization have required a distribution of the national income primarily in favour of economic development".[11] In Burma, during the first two years of the Four-Year Plan period [1956/7-1957/8], actual expenditures in the social services were considerably less than the planned investment, apparently indicating a tendency in government development financing to curtail social services programmes in times of financial stringency.[12]

It will be realized from the discussions in chapters II to IV above that "priority" is a relative concept which must be understood in the national context — one Government, for example, may state that it is giving priority to industrial development over social services but, in fact, may be spending considerably more on social services and less on industry than other countries at the same level of development — and conversely. Also a country may give "priority" to economic development, but then proceed in fact to increase its social expenditures more rapidly than its economic.

Several countries ensure that social benefits ensue from their economic development programmes by directing these programmes primarily toward the goal of full employment, which may be considered to be a social goal. This is particularly true of the Netherlands and Norway, and also of Austria.[13] In Puerto Rico, elimination of unemployment was at one time considered to be a primary goal of the economic development programme, but emphasis has since shifted to the raising of per capita income.

The following sections will consider some of the more specific techniques for integrating economic and social programmes.

Economic programmes with immediate social goals

A major means of co-ordinating economic and social development is through programmes in the one field that have an immediate purpose in the other. Thus, the aim of certain programmes technically classified as economic is not only to increase production and improve welfare in the long run, but also to achieve social gains immediately through the extension of employment. Such programmes have been adopted in more developed countries in periods of depression, and in normal periods in connexion with depressed areas. They often consist of public works projects which build

[5] M. Z. Bor, *The Planning Balance of the National Economy of the U.S.S.R.* (Moscow, 1959), p. 8 (in Russian).

[6] Communication of the Government of the Federation of Malaya, dated 11 August 1960.

[7] Republic of Venezuela, *Mensaje del Presidente de la República ante el Congreso Nacional.* Caracas, 1960.

[8] From a statement made by Mr. Gomulka to the fifth plenary session of the Central Committee of the Polish Workers' Party on 21 June 1960 (*Trybuna Ludu*, Warsaw, 22 June 1960).

[9] Communication of the Governement of the Federation of Malaya, dated 11 August 1960.

[10] Government of Pakistan, National Planning Board, *The First Five-Year Plan* (1955-60), p. 15.

[11] "Planning of Balanced Economic and Social Development in the Federal People's Republic of Yugoslavia", study prepared by the Government of the Federal People's Republic of Yugoslavia (to be issued separately).

[12] "Planning for Social and Economic Development in Burma" (E/CN.5/346/Add.4).

[13] Communication of the Government of Austria, dated 10 May 1960.

up capital resources and require considerable labour — forest conservation, construction of roads and transportation facilities, water works and irrigation, improvement of farm-lands, etc.

Public works projects undertaken in a period of depression or in a depressed region of a given country, or subsidies to certain industries, may or may not be an economically efficient and justifiable use of the nation's resources from a long-range point of view; this will depend, among other things, upon their capacity to restore economic health. But there is no doubt that they can be more efficient economically than social expenditures which take the form of cash hand-outs for unemployment relief. If public works projects and subsidies also meet the welfare goals adequately — which is sometimes a large " if " — such double-purpose economic programmes have much to commend them.

In a sense, economically less developed countries may be regarded as being in a state of continued depression. Many have extensive unemployment and under-employment, and the problem of the unemployed and under-employed workers and their families is a major issue confronting the Governments concerned. But the parallel is limited: the less developed countries are faced with a lack of productive capacity, not idle productive capacity, and the creation of demand by the wide-scale distribution of funds, whether through public welfare schemes or public works that do not increase production, is apt to cause inflation, and to be a mixed blessing from a social point of view. In any case, the economically under-developed countries do not have the funds for extensive expenditures of this kind. Where large-scale public works projects are required for economic reasons, they often rely mainly on a single factor of production, i.e., labour, either through voluntary or compulsory service or through the use of the army or para-military bodies.

Since capital is scarce and labour usually abundant in economically less developed countries, it is sometimes argued that these countries should concentrate on " labour-intensive " projects, which will absorb maximum manpower, as against " capital-intensive " projects, which will mean greater productivity per employed worker but will do less for the unemployed and the under-employed, and, in the opinion of some, may even aggravate the situation through " technological unemployment ". Thus, the official policies of India and Pakistan pay considerable attention to the development of labour-intensive small-scale cottage and village industries and afford tax advantages and other forms of assistance. There are well-known differences of opinion on this type of policy, which runs counter to the general direction that economic development has taken in western countries.[14]

An additional argument in favour of the small-scale industries, which are aimed primarily at relieving rural unemployment and under-employment, is the fact that there is already more unskilled labour in the cities than can be absorbed, and it costs the nation more to support an individual in the city than in the country. By slowing down the rate of urbanization through employment in small-scale rural industries, various urban social overhead costs could be saved. The situation is quite different from that of European countries in the nineteenth century, when the problem was often one of trying to get labour into the urban factories.

On the other hand, it is maintained by opponents of the labour-intensive, small-industry approach that such industries are more costly per unit of product, yield lower profits and less savings for investment, and in the long-run open up fewer employment opportunities than large-scale industries with capital accumulation.

Policies to improve the efficiency of small-scale industries include modernization of equipment and power supply and their integration with large-scale industries as parts manufacturers (as in Japan and Switzerland). Experience in these two countries shows, however, that wage differentials between the rural and the urban industries can cause labour problems.

In a number of cases in economically less developed countries, economic programmes are intended to help special classes of people, usually minorities, which are considered to be in special need. For example, economic programmes for depressed classes, tribal groups, indigenous populations, nomadic tribes and similar categories have a large social welfare component in their immediate purpose. Often the economic programmes are joined with purely social programmes in an integrative approach (see below).

As mentioned above, a government may also concentrate primarily for social reasons on the economic development of a particular depressed or backward region of the country. Thus, it may subsidize the establishment of new industries in parts of the country suffering from under-employment or with levels of living below the national average where, from the point of view of economic considerations (e.g., cost of transportation), the industries might not otherwise locate themselves. In the Netherlands, for example, special attention has been devoted, since 1950, to areas with structural and persistent unemployment. Originally, both encouragement of migration from these areas to those enjoying prosperity, and industrialization in the " problem areas " themselves, were considered of equal importance in efforts to reduce unemployment. It was discovered, however, that migration was unlikely to improve the situation; as most migrants were young entrants into the labour market, not long-term unemployed workers, their out-migration did not reduce unemployment to any considerable extent. Moreover, the fact that it was the younger and most active generation that left the " problem areas " counteracted the efforts to encourage new industries to settle in those areas. Stimulating industrialization in these areas, re-named " development areas ", became, therefore, the main policy instrument. It involved preparing indus-

[14] For a recent discussion of the question, see International Labour Office, *Production Techniques and Employment Creation in Under-developed Economies*, Geneva, 1958. See also *International Survey of Programmes of Social Development* (United Nations publication, Sales No.: 59.IV.2), pp. 147-150.

trial sites, subsidizing industrial construction, improving means of communication, constructing workers' housing, vocational training, etc. It was found desirable to concentrate the new industries in urban centres conveniently located in the largely rural development areas, rather than to spread them all over these areas. This had the advantage of developing local centres which are similar in many respects, even though on a different scale, to major urban centres, since they have a wide variety of services usually available in major cities which are too costly to duplicate in a rural environment, and since they dispose of manpower reserves sufficiently differentiated to include varied skills. The new centres thus became attractive, on the one hand, to new industries looking for locations, and, on the other, to prospective migrants from villages in the "development areas", who were enabled to find employment in the new industries without overcrowding the old and relatively distant major cities and to remain close to their family homes (frequently within commuting distance).[15]

In Italy, under legislation passed for the purpose of relieving the backwardness of the southern part of the country, the State provides extensive incentives to new industries establishing themselves in that part, mainly by granting them partial tax exemptions and credit on advantageous terms. Still other countries, which have under-developed areas with the manpower surpluses inherent in rural under-employment, have found that several smaller industrial plants of the same kind built in these areas have, in the long run, proved more economical, from the point of view of over-all utilization of resources, than one larger plant, even if the latter were to be more conveniently located in terms of raw materials and of energy supply. By locating small plants in manpower-surplus areas, it became possible to avoid relocation of labour to developed areas, thereby avoiding considerable investment in housing and social overhead. Programmes of this type have been reported from, among other countries, France, Japan, Poland[16] and Switzerland.[17]

Certain economic disadvantages and continuing costs to Governments of setting up new small, decentralized industries in rural areas, however, have also been encountered and cannot be ignored. According to an ILO publication, it would appear "from the Japanese experience... that promoting the growth of small enterprises not only requires government measures to bring them into existence but calls for sustained government effort to assist them in raising productive efficiency and in facing up to large enterprises..."[18] A similar experience has been reported from Puerto Rico: "The ... government ... proceeded to erect factory buildings and made strenuous efforts to induce continental American investors to rent these buildings, many of which are located in the most undesirable parts of the Island... In the short run, these efforts resulted in a harder 'selling job' for the Puerto Rican government officials, together with a loss of revenue as a result of the additional economic incentives which had to be granted. In the long run... it may turn out that some of these factories are so uneconomic that only continued financial aid from the government will keep them there. And such continued aid may be necessary since the political effects of the closing of a factory are greatly feared by government officials."[19]

Social programmes with economic purposes

Just as economic programmes may have immediate social purposes, so also social programmes may have economic purposes. This is the case whenever a social activity is considered to be a form of "human investment" (see chapter II) and is deliberately pursued from that point of view. Classic examples of social programmes with economic purposes are to be found in health projects undertaken to clear up conditions of disease and ill health in areas that are to be opened for agricultural settlement or in which roads, dams, canals, hydroelectric plants, industries or other economic undertakings are planned. The content of social programmes may be specifically adjusted to maximize their economic value; techniques used in education for this purpose are discussed below.

Another type of socio-economic problem affecting economic development and calling for special social measures is the instability of labour, which in some areas reaches grave proportions. The use of social-welfare programmes to help stabilize labour and thereby cut down the high cost of labour turnover has been mentioned above.[20] Measures of this kind include not only incentives in the form of higher wages for longer services and for improvement of skills, but also holidays and bonuses contingent upon a period of continuous service, and assistance in child care, education, health and recreation, etc., designed to make life attractive in the neighbourhood of the industry or mine.

In the modern large industry, health centres, dining halls, facilities for rest and recreation and other welfare purposes are built into the establishment and are usually counted as part of the capital investment. Like heating,

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[15] "Planning for Economic and Social Development in the Netherlands with Particular Reference to the Post-War Years" (E/CN.5/346/Add.6); see also G. Hendricks, "Mode of Working in the Social Planning for the Dutch Development Areas", paper attached to communication of the Government of the Netherlands, dated 28 November 1960; and P. C. J. van Loon, "The Netherlands Project", paper submitted to the United Nations European Seminar on Social Research and Community Development in European Problem Areas, Palermo, 1958.

[16] "Planning for Balanced Social and Economic Development in Poland" (E/CN.5/346/Add.1).

[17] For more details on such programmes, see *International Survey of Programmes of Social Development*, op. cit., p. 149.

[18] "Production Techniques and Employment Creation in Underdeveloped Economies", *International Labour Review*, vol. LXXVIII, No. 2, p. 143.

[19] A. J. Jaffe, *People, Jobs and Economic Development, A Case History of Puerto Rico Supplemented by Recent Mexican Experience*. A Report of the Bureau of Applied Social Research of Columbia University (The Free Press of Glencoe, Illinois, 1959), pp. 347-348.

[20] See chapter II.

ventilation and light, they are accepted as more or less necessary items of equipment. Housing and transportation may also be provided by the establishment. Such built-in facilities represent, in a sense, the simplest form of co-ordination and integration of economic and social development. Although the view may be put forward that they are a form of human investment and affect morale and efficiency and thereby production, that has not been the main reason for their establishment. The basic motive has been improvement of social standards. Both national and international labour policies have incorporated these rights in laws and conventions.[21]

Where social insurance or welfare funds are built up as part of social policy and charges are made on enterprises, these charges have sometimes been used as a means of influencing economic activity (e.g., through reduction of charges for certain types of desired industry), as is the case with other taxes and charges. The funds themselves are a form of forced savings which can grow to great size and can have considerable economic significance. They may be used directly for productive investments in selected projects of economic development, although this policy has encountered opposition on the grounds that funds set aside for the benefit of workers and their families should not be tampered with and placed in possible jeopardy. Such funds are also frequently invested in residential housing — a system that may directly benefit the workers who have contributed to the funds, but that in some cases has resulted, in practice, in housing for middle-income groups rather than the workers. Even if the surpluses are left idle, they may play a significant role as anti-inflationary offsets to spending in other sectors of the economy. (In the present circumstances, these considerations are of less importance to economically less developed countries than to economically more advanced areas.) In most instances, however, social insurance fund reserves are neither directly invested in economic development projects, nor left idle; they are invested in securities issued by public bodies (such as central, state, provincial or local governments or public corporations); the real impact on economic development of the reserves so invested is likely to depend more on the borrowing body's expenditure policies and structure than on the intentions and policies of the funds' managers. It should be noted that, in many countries, the investment opportunities of social insurance and welfare funds are by law limited to securities of the type just described. In the United States, certain welfare funds established by collective bargaining between employers' and employees' organizations have recently begun to invest their surpluses in publicly traded stocks and participations. This type of investment serves to protect the funds against devaluation through inflation, but is rarely intended to provide the funds with a voice in managerial decisions affecting the corporations in which the reserves are invested. In certain other countries, as in Israel, funds have been able to acquire a considerable — sometimes even preponderant — influence in the management of the enterprises in which they have invested their surpluses, and thus the funds have acquired an important role in the direction of the national economy.

[21] See International Labour Organisation, *Welfare Facilities for Workers*, Reports VIII (1) and VIII (2) for the Thirty-Eighth Session of the International Labour Conference in 1955, and Reports V (1) and V (2) for the Thirty-Ninth Session in 1956.

Integrative programmes

The most complete economic and social integration occurs in programmes that are simultaneously economic and social in both content and purpose, and are administered in a unified fashion. In a sense, any development plan that combines both economic and social features might be so classified, but, in practice, in many such plans the integration is usually limited to the planning phase as such and does not extend to administration and operations after the allocations have been made to the separate departments. The reference here is to programmes in which the multiple-purpose character is reflected in administration and operations, as well as planning.

Perhaps this may best be illustrated by a *community development programme* that is co-ordinated at all levels, both at the centre and in the field, and that combines social projects, as in health and education, with economic projects, as in agricultural production and transportation. The Community Development Programme of India is of this type. Both the social and the economic components of such community development programmes rely on voluntary labour, and on local initiative combined with government assistance; the same person at the village level — the "multiple-purpose village-level worker" — has both economic and social responsibilities in promoting village action. The need to achieve "balanced economic and social development" has, in fact, been a major consideration in the establishment of community development programmes. In some places, however, it appears that increased production has been more difficult to achieve through community development than have certain social advances.[22]

Whether techniques similar to those of community development can and should be extended to urban areas is a matter currently under study.[23] Experience with community development has until now been largely limited to rural areas. Should it prove feasible to undertake similar programmes in cities, a step could be taken in the direction of making the integrative approach a central point of both rural and urban development.

Closely integrated economic and social development will also be found in certain regional development projects, such as the Tennessee Valley Authority (TVA)

[22] *Community Development and Economic Development, Part I: A Study of the Contribution of Rural Community Development Programmes to National Economic Development in Asia and the Far East* (United Nations publication, Sales No.: 60.II.F.6, Part I).

[23] On the subject, see United Nations, "The Applicability of Community Development to Urban Areas" (E/CN.5/356). See also "Proposals for Concerted International Action in the Field of Urbanization" (E/CN.5/351).

in the United States and the Gezira Plan in the Sudan, to name two of the better-known examples. In these regional programmes, and in programmes for special classes of the population, as well as in community development programmes, the problems of co-ordination are formidable, since established ministries tend to carry out their separate functions on a nation-wide basis and there is often reluctance to revise this procedure on behalf of an integrated development programme. A regional development authority may also come into conflict with the authority of state Governments.[24]

As a final example of an integrative development programme, land settlement and land reform projects may be mentioned. The commonly stated purpose of land reform is to improve the income and welfare of a given group of people by re-distribution of wealth and, at the same time, to increase agricultural production. In the case of land settlement programmes, a re-distribution of population is attempted in order to establish a better adjustment to land resources and thus to raise the level of living. It is assumed that in land reform programmes the peasants who receive the land will be induced to produce more crops, although, as noted in chapter II, this expectation has often been belied when supporting measures to assist the farmers in meeting their various problems are not made part of the land reform programme. There has been a tendency in recent years to introduce economic considerations of productivity directly into the land reform process by exempting from re-distribution certain estates meeting productivity criteria, or by reducing the amount of their lands re-distributed, as well as by imposing on new landlords certain conditions designed to ensure adequate production.

Complementarity, projections and the balancing method

Complementarity is one of the classic concepts of economics; it refers to the production or existence of certain goods, which serve no useful purpose alone, but which require the provision (prior, simultaneous or subsequent, depending on circumstances) of some other goods in order to become useful (for example, rails are useless for transportation purposes unless rolling stock is provided). This concept can be extended to cover facilities; it has been noted that " certain facilities will be found necessary because they perform auxiliary functions for more primary objectives. The construction of an industrial plant in a remote region requires the construction of a number of dwellings, and certain communication facilities. Once it has been decided to carry out the main projects, the execution of the auxiliary activities has also to be accepted." [25]

As may be seen from the above quotation, economic projects may require complementary social programmes, even though the importance of the latter in this context is regarded only from the point of view of the extent to which they contribute to the achievement of the economic objectives.

Projections provide a technique for taking complementarities into account in a future period. An essential part of current planning or programming is the use of projections of the future behaviour of certain economic variables, such as per capita income or per capita consumption; projections are made on the assumption of a continuation of current trends or on certain assumptions relating to the effects of forces or policies expected to influence the behaviour of these variables.[26] If a clear relationship exists between a projected variable and other variables, it will be possible to indicate what the implications of future development in one area will be for other areas. If two areas thus related are respectively economic and social, this can be an important basis for the co-ordination of economic and social development.

Thus, if a certain growth in industrial production is projected, the requirements in housing transportation, professional manpower, skilled labour, etc., can also be projected and can serve as a basis for co-ordinated planning. Similarly, analyses can be made through projective techniques of the implications for the size of the future labour force (and hence for economic activity) of the extension of compulsory schooling by a given number of years, or the significance of projected demographic growth or urbanization trends for future housing.

There are two areas in which projections play an increasingly significant role in the interrelation of economic and social development: demographic projections and projections relating to trained personnel of various categories.

Economic development planning or programming must obviously take the growth of population into account if it is to set realistic goals for employment, production and other needs of the future.[27] Many economists and demographers have estimated the volume of investment necessary for the capital requirements of a growing population. Assuming a capital-output ratio from 4 to 5, for example, it has been estimated that, to maintain existing levels of living, with 1 per cent of population growth, it is necessary to have an annual investment of 4 or 5 per cent of the national income; with 2 per cent annual population increase, the investment rate required rises to 8 to 10 per cent, and this

[24] See the discussion of the Damodar Valley project in the paper " Planning for Social and Economic Development in India, with reference to the Damodar Valley Project Area: A Case Study " (United Nations, E/CN.11/DPWP.5/L.5).

[25] Jan Tinbergen, *The Design of Development* (The Economic Development Institute through the Johns Hopkins Press, Baltimore, 1958), p. 31.

[26] See United Nations Economic Commission for Latin America, *Analyses and Projections of Economic Development, An Introduction to the Techniques of Programming* (United Nations publication, Sales No.: 55.II.G.2).

[27] See *Population Growth and the Standard of Living in Underdeveloped countries* (United Nations publication, Sales No.: 54. XIII.7), p. 1. For population projections in the ECAFE region, see " Population Trends and Related Problems of Economic Development in the ECAFE Region ", *Economic Bulletin for Asia and the Far East*, vol. X, No. 1, June 1959.

further increases to 12 to 15 per cent with an annual population increase rate of 3 per cent.[28] But when a rise in levels of living is desired, the proportion of national income required for investment is higher. With a population growth of only 1 per cent per annum and an objective of an increase of income per capita at the rate of 3 per cent (which is modest if a real change is wanted), it has been estimated that an investment programme of as high as 16 to 20 per cent will be needed.

Population projections are usually prepared by projecting separately the trends of the factors of population growth, that is, of fertility, mortality, and possibly migration, in relation to the age groups of the population. Use is made of the compound interest or an analogous mathematical formula to arrive at future population estimates. While such techniques are useful to obtain an over-all picture of the situation in relation to "aggregate projections" and "macroprogramming" (concerned with categories such as national income, investment, over-all savings, etc.), more refined demographic techniques are useful for detailed "projections by sectors" and "micro-programming".[29]

An example of a more refined approach is the "component" method of population projection, whereby the trends in birth and death rates are applied to the age and sex composition of a population.[30] This method can be used for estimating such quantities as (*a*) the number of families at a future period; (*b*) the future school-age population; (*c*) the future labour force.

In view of the problems of adjusting the supply of professional and technical personnel to future needs, projections of supply and demand of such personnel clearly have a critical importance in development planning and in the co-ordination of economic and social development. The International Conference on Public Education, at its meeting on the recruitment and training of technical and scientific staff, held at Geneva in 1959, recommended, among other things, periodic surveys "of present and future needs at the various levels (scientists, engineers, technicians and skilled workers) without prejudice to any one category."[31] The surveys should include consideration of present staff, diplomas awarded, training facilities, funds available for the training and possible means of additional financing.

In the countries with centrally-planned economies such projections are closely co-ordinated with educational planning. In the USSR, for example, full-time compulsory education now ends with the eighth year; the majority of graduates enter productive employment, with various provisions for continued vocational training, part-time education or correspondence courses. The institutions taking students above the eighth year prepare annual and long-term plans for enrolment, taking into account the requirements of the surrounding region for specialists. These plans are co-ordinated at the Republic and Union levels, and integrated with calculations balancing manpower needs and resources for the whole economy. A national plan for the training of specialists emerges.

Under this system, the number of enrolments in any one subject is determined by the plan rather than by the popularity of the subject, so that not all students may be able to enter the courses of their first choice, since school vacancies will not be available; but, if the forecasts of the plan are correct, all of the students will find jobs making use of their training. Annual plans are also prepared for the allocation of newly trained specialists to employment, with placement handled by the institutions themselves. Students taking part-time or correspondence courses are not included in these annual allocation plans, although they are taken into account in the longer-term plans for trained personnel. Some of the part-time students, in fact, are acquiring formal qualifications for specialist posts that they already occupy on a provisional basis.[32]

Many economically developed countries without centrally-planned economies are also undertaking elaborate assessments both of future needs for skilled manpower and of the supplies likely to become available.[33] Such studies are increasingly used both to distinguish key shortages (as in science and technology) that demand emergency measures and to indicate the most desirable lines of adaptation of the school system to new conditions. The Netherlands, in particular, has undertaken detailed long-term planning for professions requiring a long training period (university graduates) and for skills expected to be in especially short supply. In the professional fields, forecasts of annual demands for new entrants have been worked out up to 1970 and 1980 and have been compared with the 1955 number of graduates in each field, as a basis for calculating shortages and surpluses and thus for estimating needs

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[28] *Processes and Problems of Industrialization in Under-developed Countries* (United Nations publication, Sales No.: 55.II.B.1), p. 15.

[29] On the use of these concepts, see Tinbergen, *op. cit.*, and *Analyses and Projections of Economic Development, I. An Introduction to the Techniques of Programming*, United Nations publication, Sales No.: 55.II.G.2.

[30] For some descriptions of the methods of component projections of population see, for example, *Methods of Population Projections by Sex and Age: Manuals on Methods of Estimating Population* — Manual III (United Nations publication, Sales No.: 56.XIII.3) and *The Future Growth of World Population* (United Nations publication, Sales No.: 58.XIII.2). For examples of practical application of these methods, see *inter alia, The Human Resources of Central America and Mexico 1950-1980 in Relation to Some Aspects of Economic Development* (United Nations publication, Sales No.: 60.XIII.1, in press), and *Population Growth and Manpower in the Philippines* (United Nations publication, Sales No.: 61.XIII.2).

[31] UNESCO/IBE/6. 1959.

[32] Communication from Government of the USSR, dated 29 July 1960. For details on a similar system in Poland, see "Planning for Balanced Social and Economic Development in Poland". In Poland, the use of "perspective plans" covering the period of several of the more detailed national plans permits the State to make decisions on the prerequisites for expansion of certain types of education ten years or more before the increased number of graduates is needed.

[33] The report of a 1950 conference sponsored by UNESCO described the methods used in some countries: *Education in a Technological Society*, Tensions and Technology Series, Paris, 1952 (SS.51.V.2A).

for expansion of enrolment in some faculties. The Netherlands, however, has not attempted a comprehensive co-ordination of education with manpower demands, and a recent study concludes that "a systematic and integrated model through which problems in the field of education and manpower can be viewed in their entirety does not yet exist."[34] In fact, most educational authorities outside the countries with centrally-planned economies, while they consider manpower surveys highly useful, dot not favour the matching of educational output with expected manpower demands in any comprehensive or precise way. In the first place, the educational and manpower planners have only limited confidence in their own ability to make accurate long-term forecasts in an age in which new skills are continually being created and old ones are becoming obsolete; they feel that the schools should impart adaptability more than training for specific jobs. In the second place, while national authorities can influence school systems in many ways, in most countries they cannot control these systems in detail and would not be supported by public opinion if they tried to exercise such control.

The co-ordination of education with manpower needs is a much more urgent question in less developed countries than in countries that possess a large reservoir of skills, and many efforts along these lines are now being made, ranging from common-sense evaluations to precise forecasts for specific skills and professions. Most national development plans, as well as the country studies prepared by the International Bank and other inter-governmental agencies, give some attention to the subject, though often keeping to general terms. UNESCO has sponsored a study of scientific and technical manpower needs covering much of Asia.[35] A commission headed by Sir Eric Ashby, which reported in 1960 on educational needs in Nigeria, made estimates of Nigeria's requirements for technicians and professionals through 1970 and 1980.[36]

Some of these studies have led directly to practical programmes. In 1957, for example, the Department of Industrial Research of the Bank of Mexico circulated detailed questionnaires on the demand for technical and skilled manpower to a sample of 18,000 industrial establishments throughout the country. The replies were tabulated and discussed with managers of selected industries before a study was prepared taking into account projections of the growth of industry up to 1960 and 1965 and showing significant manpower gaps in certain branches of industry. This study became the basis for a training programme organized by the Bank in co-operation with fifteen Mexican universities, the United Nations Bureau of Technical Assistance Operations, the ILO and UNESCO.

[34] "Planning for Economic and Social Development in the Netherlands with Particular Reference to the Post-War Years", op. cit.

[35] W. Brand, "Requirements and Resources of Scientific and Technical Personnel in 10 Asian Countries", *UNESCO Statistical Reports and Studies*, 1960 (SS.60.XVI.6A). This report discusses the methodology of such studies.

[36] *Investment in Education*, Lagos, Nigeria, Federal Government Printer, 1960.

The report of the 1950 UNESCO Conference on Education in a Technological Society warned that estimates of supply and demand for manpower are "tools of varying value. They should be placed in the hands of the policy-maker and the administrator as indications only. The tools may, on occasion, be blunt; the estimates may be wildly inaccurate... The absence of any infallible formula, however, does not make foresight less necessary."[37] This warning applies with particular force in countries that have only imperfect information on the numbers of persons practising various professions and their qualifications, let alone on the numbers of technicians and skilled workers.

Often the projections of trained personnel have to be quite crude. It is usually difficult even to know the present supply, as a base figure, except where there is compulsory registration of the personnel in question. Questionnaires have been used, but the returns are apt to be incomplete in coverage, while at the same time poorly-qualified individuals may paint an unduly optimistic picture of their training and abilities. The processing of the data may also be quite time-consuming and expensive. The supply of graduates from domestic and foreign institutes is an important source of data, as are census data and sample surveys where available.

It is usually assumed that the existing ratio specialists to the quantity of production in industry, agriculture, transport and communications, etc., will be maintained in the future, so that, given the projected production figures, the educational requirements will be known. Ratios from other countries are sometimes used as a rough guide when local data are lacking. In Japan, requirements have been determined through sample surveys of employing establishments and projections based on expected annual growth rate of the economy, on the assumption that the distribution in the different branches of activities will remain constant.

Projections of requirements for trained personnel in social fields, however, are not necessarily simple projections based on the existing situation and the expected rate of growth of client population; they usually also involve assumptions concerning future standards. Thus, projections of requirements for physicians will take into account standards that may not yet have been attained for the ratio of physicians to population.

Up to the present, most studies relating education to skilled manpower needs in the less developed countries have been carried out by experts or committees without any guarantee of continuing attention to the problem. One of these experts has concluded, however, that "a permanent organization is required to keep the supply and demand of scientific and technical personnel effectively under review. *Ad hoc* investigations may be valuable in certain respects, but they will often point up the necessity of creating a continuing agency for the purpose... If more scientists and technicians of a particular kind are required for development, the curricula of universities and colleges, the social pro-

[37] *Education in a Technological Society*, op. cit., p. 20.

cesses for the selection of students and the secondary school programme and its orientation may come under investigation." [38]

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The "balancing method" provides the basic means for relating economic and social programmes (as well as for relating and reconciling conflicting requirements of the programmes in either of these two fields) in the Union of Soviet Socialist Republics and in countries with similar planning machinery. This method, involving analysis of complementarities and the use of projections, consists in comparing the prospective availability of materials, goods, services and manpower during the period covered by the plan (or a specific period shorter than that covered by the plan) with the requirements for them during the same period. In essence, the balancing method is analogous in some respects to the method used by planners in countries with free enterprise and mixed economies with regard to specific materials that are required for projects undertaken, or encouraged, by the State, but that happen to be in short supply. In some countries with mixed economies and comprehensive planning, the methods used are also similar in various respects to the balancing method used in countries with centrally-planned economies.

The broad scope of the planning of production and services in countries with centrally-planned economies requires precise information on availabilities and requirements of as many materials and skills as possible.

With experience in planning, the balancing method was extended from materials to skills and to capacities—for example, balancing existing production and processing capacities with requirements for semi-finished products or finished goods. In the social field, this extension has included balancing capacity of existing training facilities with requirements for professional and technical skills. Other relevant balances now made include that of residential housing, both existing and prospective under a given assumption, with expected requirements resulting, *inter alia*, from the rate of family formation. An example of the application of the balancing method may be taken from the planning of health services. The existing capacity of the national health services and the numbers of available medical personnel are evaluated in terms of prospective requirements for services, expressed in categories such as ambulatory visits to health centres, physicians' and nurses' home visits to the sick, and "hospital-days". These requirements are arrived at through projections, for various years, of population figures and morbidity statistics, due account being taken of such factors as differential incidence of specific diseases, estimated medical capacity to deal with them, future age and occupational structure of the population, urban-rural population distribution, and the postulated standards of service. The calculation of the extent of additions to training facilities is one of the more difficult planning tasks, since the time lag is quite considerable between the initiation of such new facilities, often involving construction work and the preparation of teaching personnel, and the final result of the programmes based on them. Decisions regarding the expansion of physical facilities for training and of the teacher supply must therefore be made ten or more years in advance of the date at which the newly graduated physicians will be needed. Programmes for expanding both medical service and training facilities are, in turn, affected by balances in other sectors and by decisions as to priorities based on such balances. For example, the balance of construction materials will influence ultimate decisions regarding the construction of training facilities; the balance of the precision instruments industry will be relevant to decisions concerning the standard of equipment of surgery facilities in hospitals. Also, decisions regarding the expansion of medical training facilities may be affected by requirements for graduates of other courses of training.

The balancing method is used to measure "reserves" of materials, skills and capacities that are not matched by requirements and may, therefore be assigned to new uses. Apart from the addition of new productive capacities, the mobilization of reserves discovered by this application of the balancing method is the most important single source for the expansion of production and services, and thus for better satisfaction of the needs of the population. The "reserve discovery" aspect of the balancing method is of particular importance in a period when rapid technological progress augments the availability of traditional materials, by increasing productive capacity, and by substitution of new materials or better utilization of the traditional ones. The same reasoning applies to the increasing availability of manpower that, as a result of technological progress, has become available for new tasks.[39]

Administrative arrangements for the co-ordination of planning for economic and social development

The role of public administration in many countries has suddenly expanded from the traditional one of primary concern with tax collection, maintenance of law and order, and similar accepted functions, to the management of large and complex development programmes. Whether such programmes are co-ordinated and integrated in actual practice depends upon the capacity of the government administration to adapt its structure and take over this new role. The determination of priorities and the appropriation of public funds for development purposes remain questions for political decision in most countries, but the formulation and execution of programmes are generally the responsibility

[38] W. Brand, "Requirements and Resources of Scientific and Technical Personnel in Ten Asian Countries", op. cit., p. 10.

[39] For certain aspects of the balancing method and of its application, see statement by the delegate of the USSR to the Fifth Session of the ECAFE Working Party on Economic Development and Planning, Bangkok, 23 September 1959, and Bronislaw Minc, *Planowanie Gospedarki Narodowej* (Warsaw, 1955), vol. I, pp. 50-56.

of the government administration, which may be, and often is, ill equipped for these tasks.

Effective development planning thus requires not only an adequate plan but also an administrative structure that will ensure satisfactory co-ordination and integration of social and economic programmes. It is possible to examine the administrative structure from a number of angles. In the first place, co-ordination and integration of social and economic programmes may be seen as a problem of relationship among the different government departments and government-controlled corporations in the *formulation* of development programmes, both horizontally among the different units concerned and vertically through all levels, i.e., from the highest to the lowest. Secondly, questions of administrative co-ordination arise at the execution stage.

It is often felt necessary to set up special administrative machinery of various types (e.g., planning commissions, development ministries, regional authorities) for development programmes that involve multiple fields of activity. New organs, which may combine economic and social functions, are considered to have the advantage of departing from traditional bureaucratic procedures and of starting with more efficient and flexible methods, better adapted to over-all programmes. But these advantages may be offset if there is excessive proliferation of new machinery and duplication of effort with existing administrative services. Co-ordinating committees, set up among existing agencies but without actual executive authority, represent another important mechanism; such committees can also proliferate beyond requirements, however, and can absorb more time and energy than is justified by the results.

The present brief summary deals only with machinery for co-ordination at the national level. It should be kept in mind, however, that the approach to planning and co-ordination is often highly pluralistic. One may find, despite an apparent absence of central machinery specifically charged with co-ordination, an elaborate network of arrangements for consultation and control, involving national government agencies, provincial and city governments, public corporations, universities, and even non-governmental agencies that have been entrusted with social or economic functions (such as the national Red Cross society or its equivalent).

In the majority of countries, whether or not there is a long-term development plan, the Government's immediate programme is contained in an annual operating budget and a capital budget which may cover a longer period of time. These budgets may be accompanied by proposals for legislation.[40] The budgets represent a reconciliation, usually by a bureau reporting to the cabinet or council of ministers or directly to the chief of state, of the proposals of separate departments and agencies, as well as of the recommendations of official advisory bodies. If there is no long-term development plan, the budgets are the main instruments through which priorities are determined and the resources available to the Government distributed among competing programmes. The budgets are normally submitted to a parliament or other legislative body which may modify their provisions and thus also take part in the process of programming.

In these cases, the budgetary agency may assume broad responsibilities for co-ordination of social and economic programmes. This is true of the United Kingdom, where the Treasury's Department of Supply, following priorities set by the Cabinet, attempts " so to control public expenditure as to achieve a balance in the programmes financed by that expenditure.... Strictly, it would be satisfied only when expenditure was so distributed that the last pound spent on each programme produced the same amount of public good." [41] The Department of Supply is empowered to review and criticize all proposals for new policies or legislation involving expenditure before it is presented to the Cabinet. It is divided into seven divisions, each controlling the expenditure of a group of government agencies; one of these divisions, for example, deals with social services, another with agriculture and food.

In a number of countries, the fiscal budget submitted to the legislature is supplemented by a broader report showing the relationships between the Government's intended expenditure and the national economy. In Norway, for example, such a report is called an economic budget (*nasjonalbudsjettet*) and is prepared by a bureau within the economic affairs division of the Ministry of Finance. This bureau is assisted by an advisory Economic Budget Committee composed of representatives of government agencies, including the Ministry of Social Welfare and the Central Bureau of Statistics, which maintains contact with organizations outside the governmental framework. The Economic Budget is discussed and approved by the Cabinet before presentation to Parliament. The Government of Norway has also prepared three long-term programmes (the most recent for the years 1958-1961), through *ad hoc* groups of civil servants assigned temporarily to this task, but it has not been decided whether such programmes will be presented in the future.[42]

If the country has a development plan, this too is usually passed upon by the cabinet and submitted to the legislative branch for approval or modification, although approval of the plan may not guarantee appropriation of funds beyond the year of submission. The actual preparation of the development plan is normally the responsibility of a planning agency which may be directly represented in the cabinet (for example, a Ministry of Planning) or which may be a subsidiary or advisory body (such as a National Planning Board, Commission or Council) reporting, like the budget

[40] For a detailed analysis of this method of programming, see " The Fiscal Budget as an Instrument of Programming Economic Development ", E/CN.12/521.

[41] Samuel H. Beer, *Treasury Control: the Co-ordination of Financial and Economic Policy in Great Britain*, Clarendon Press, Oxford, 1956.

[42] " Planning for Balanced Social and Economic Development in Norway ", op. cit.

agency, to the cabinet or the chief of state, or attached to an economic ministry or to the state bank.

The kind of co-ordination of economic and social development that obtains in an administrative sense depends, among other things, upon the nature of the planning work undertaken. For example, in some cases planning work is essentially no more than a compiling of desirable objectives and proposed expenditures — covering economic alone, or economic and social, activities — put forward by the separate ministries and realized according to executive or legislative decision on priorities, as funds become available in the period covered. In other cases, planning work consists primarily of research by an expert staff on current trends and on the implications of alternative governmental policies, including the social implications of economic policies and *vice versa*, thereby providing an analytic basis to assist executive or legislative decisions. In still other cases, specific targets are set in both economic and social fields under a comprehensive plan that incorporates decisions on priorities covering all sectors, and relates future expenditures to planned production and income. Where the primary emphasis in planning is on regional development, administrative arrangements for economic and social co-ordination will be of yet another type.

A few countries have set up separate dual bodies to handle social planning and economic planning. Unified planning systems are much more common, however; some countries that have in the past used dual planning arrangements have abandoned them, partly because these systems did not appear to result in satisfactory co-ordination of the two fields, or even within the social field. In Burma, for example, where a largely independent Social Planning Commission had existed for a number of years, in 1959 it was at first subordinated to the Ministry of Social Welfare (with which it had worked most closely when still an independent agency) and subsequently abolished. It appears that the Social Planning Commission's usefulness as an over-all planning organ in the social field was impaired by its inability to establish proper working relationships with other "social" ministries, such as the Ministry of Education. As a result, the Burmese Social Planning Commission was unable to co-ordinate sectoral plans emanating from ministries other than that of Social Welfare, and became, in fact, an adjunct to the latter;[43] formal subordination and then absorption were the logical consequences. In the Egyptian region of the United Arab Republic, also, social and economic planning were for a period carried out independently by two separate and co-equal boards (subject only to co-ordination by the Council of Ministers), but these arrangements were abandoned in 1957, as a result of criticism to the effect that the bifurcation of economic and social planning and policy-making machinery had limited the extent of examination of proposed economic programmes from the point of view of their possible social implications. Under present arrangements, responsibility for the policy and technical aspects of social planning have been assigned to separate organs of the new consolidated planning machinery, along with similar work in respect to economic planning.

Unified socio-economic planning agencies have been developed most extensively in countries with centrally-planned economies. The planning machinery of these countries, with special reference to the social aspects, was described in an earlier report.[44] Since then, the arrangements described have undergone important changes, some of which are changes in practice rather than formal legislative revisions. The changes have varied in extent from country to country, but they have certain elements in common.

The lengthening of the time period covered by planning is one such common element. In the USSR, it is reflected in an extension of the period covered by the long-term development plans; while five-year periods were, until 1955, almost invariably standard for such plans, the present development plan covers seven years (1959-1965). To emphasize the long-term character of this plan, it is generally called a "perspective plan". Moreover, it is likely that the time period covered by future perspective plans may be even longer. Perspective plans for certain branches of the economy are also worked out for ten or fifteen years, or even longer periods.[45] In Poland, the perspective plan is intended to provide the guidelines for, and to dovetail, several consecutive regular long-term plans, each covering five years. The period to be covered by the first perspective plan was originally contemplated as one of fifteen years (1961-1975), but was subsequently extended to cover twenty years (1961-1980). The tendency towards lengthening the period covered by long-term development plans is due to various factors, among which the growing technical and economic complexity of major investment projects is only one. From the social point of view, the necessity of meshing economic programmes with population projections, and the increasing dependence of the programmes' success on the availability of sufficient professional and highly skilled technical personnel is of some importance, since the preparation of such personnel, including the provision of teaching and training facilities, must transcend the traditional five-year period of a long-term plan.

Limitation of the managerial functions of the central planning authorities is another common feature of the changes that have occurred in the planning systems of the east European countries since 1955. In this respect, the Polish reform was the most radical. Under earlier legislation enacted in 1949 and 1950, the former Polish State Planning Board was able to exercise considerable influence on the policies of other government departments; that influence resulted not only from the circumstance that by law the Board had a prominent position as the originator of policies, but also from the extent of the operating responsibilities that had been

[43] "Planning for Social and Economic Development in Burma", op. cit.

[44] *International Survey of Programmes of Social Development*, op. cit., pp. 201, 204.

[45] N. R. Bychek, *The organization of planning for the national economy of the USSR* (Moscow, 1955), p. 36 (in Russian).

vested in it. As it was a highly centralized body, with power of decision on most matters of any importance resting with its Praesidium, this situation not only created a number of bottlenecks and administrative difficulties, but also resulted in delays in planning work itself. The separation of the co-ordinating and operating responsibilities from the strictly planning functions therefore became the crucial point of the 1956-1957 reform of the Polish planning system.[46] The Planning Board was reorganized, divested of its managerial functions, and forbidden to interfere with the current work of the ministries, which were given full responsibility for policy and operations within their respective fields; the tasks of the central planning agency were strictly limited to planning work proper and to closely related activities. A similar pattern of reform was carried out in Czechoslovakia. In the USSR, some of the co-ordinating and executive functions of the State Planning Board were, under the reform of 1955, transferred to individual ministries in both the economic and social fields. In the 1957 planning reform, even the remaining managerial functions were removed from the jurisdiction of planning organs and assigned to the newly organized regional economic councils.

Decentralization is the third common element in the changes undergone by the planning arrangements in many of the countries with centrally planned economies. Decentralization was most radical in the Soviet Union where, owing to the very size of the country, inefficiency fostered by over-centralization caused considerable losses. From the functional point of view, decentralization in the Soviet Union was quite thorough-going in the social field, where it involved the transfer to the Governments of the individual Union Republics (within the limits of the over-all planning decisions as to investment and accumulation, which continue to be set by central policy directives) of policy-making and planning in the separate sectors, except those of higher education and of prevention of epidemic diseases. In addition to the preparation of central policy directives, the responsibilities of the All-Union Planning Board include co-ordination of possibly conflicting decisions made by the planning boards of the individual Republics, and ratification of their other decisions. Operating responsibility in the social field was also transferred to the Governments of the individual Republics; in the case of those Republics subdivided into administrative regions (*oblasti*), operating responsibility for certain social sectors was transferred to the governments of the *oblasti*. The regional economic councils established under the 1957 reform have no responsibilities in the social field, but their duties include operation of most industrial plants manufacturing goods required for the implementation of programmes in the social and cultural fields, such as printing plants and factories producing medical goods, all of which were previously operated by the ministries under whose auspices such products were used or distributed. The necessary co-ordination, on the level of individual Republics, between the ministries responsible for the operation of social programmes, and the regional economic councils which have assumed similar responsibilities in the economic field, is one of the functions of the planning boards of the Republics. Their authority in such cases is based on the fact that the areas controlled by regional economic councils are always wholly within the same Republic.[47]

In Poland and Czechoslovakia, decentralization in the social field involves both planning and operations in certain sectors, but only operations in others. Even in sectors where planning remains the responsibility of the central organs of the State, the impact of the decentralization principle has resulted in increased weight being given to proposals submitted by the regional governments to the central planning boards. Policy-making has remained the responsibility of the central authorities in both countries.

In Yugoslavia, the decentralization of the planning system began earlier than in the USSR and in the other countries with centrally-planned economies; it appeared in a series of reforms enacted between 1952 and 1954. The extent of decentralization provided by for Yugoslav legislation is considerably broader than in the other countries mentioned above, where the role of the planning units of local governments, as well as that of the citizens themselves assembled in rural or urban precinct meetings,[48] is largely initiative and advisory. In Yugoslavia, however, actual planning and operating responsibilities have been assigned to the municipalities, both rural and urban. Within the urban municipalities, administrative precincts (" housing communities ") are responsible for the operation of some social services directly affecting everyday life (such as local health facilities and centres for the care of children of employed parents), and corresponding planning responsibilities have been assigned to these precincts. Thus, in the social field, the role of the planning organs at the higher levels of government is largely a co-ordinating one. The Yugoslav Government also reports that, " of particular significance in the elaboration, adoption and implementation of social plans is the participation of public opinion through representative bodies, various forms of social self-government in the economy and in non-economic activities. The participation of citizens in the elaboration and implementation of planned tasks is especially ensured through the assemblies of voters and housing communities." [49]

In economically less developed countries where unified economic and social planning systems are in existence, increased preference appears to have been shown in recent years for boards that concentrate exclusively on planning policy without managerial or operational re-

[46] " Planning for Balanced Social and Economic Development in Poland ", op. cit.

[47] There may be one or more economic regions within the territory of an individual republic; in the latter case, the economic regions may, or may not, be coterminous with the administrative regions.

[48] For the role of urban precinct and village meetings in the planning process in Poland, see " Planning for Balanced Social and Economic Development in Poland ", op. cit.

[49] " Planning of Balanced Economic and Social Development in the Federal People's Republic of Yugoslavia ", op. cit.

sponsibilities or involvements. Thus, in Indonesia, an independent National Planning Council was established under the 1960 constitutional change. Subject to the final authority of the President of the Republic, over-all responsibility for planning in the economic, social and cultural spheres is vested in the National Planning Council, which thus superseded the separate planning organs which had existed under the earlier and more involved administrative planning system and which had been subject to Cabinet control. In Pakistan, the Planning Commission and the Economic Council, respectively, perform similar functions under the control of the President.

In most countries, planning boards or councils are deliberative bodies, with control over the variously named secretariats which are charged with preparatory planning work and at a later stage with the necessary legislative drafting. From the point of view of co-ordination, the role of these secretariats is pivotal, since they are responsible for collecting, marshalling and co-ordinating the factual material on which further planning work is based, and for its coherent presentation to the policy-making bodies. In India, for example, the planning secretariat is divided into general divisions, which are concerned with individual sectors of the economic and social life of the country, such as agriculture, industry and minerals, village and small industries, transport, natural resources, health, education, etc., as well as into divisions which are concerned with the totality of the economic and social life, but from specific points of view (e.g., statistics and manpower); interest in social planning is thus represented, on the one hand, by a number of divisions of the first category, and, on the other, by certain aspects of the work of those in the second category. With a view to securing expert technical advice and assistance, the planning boards make extensive use of *ad hoc* technical committees or panels, consisting of officials and other persons with special knowledge and experience in the given fields. In India, there were, in 1959, seven panels of economists and scientists, including panels on education, health, housing and regional planning, labour and land reform. In 1953, the Planning Commission also set up a Research Programmes Committee to initiate and encourage research on economic, social, administrative and political aspects of development. The Committee, which is headed by the Deputy Chairman of the Commission, consists of eminent social scientists. It works in close co-operation with universities, research institutions and schools of social work in the country. Planning councils and similar agencies in other Asian countries such as Pakistan and Ceylon have also made extensive use of technical working groups, panels and various consultative bodies, which include representatives of employers' and workers' unions, chambers of commerce and research institutions, as well as social scientists, university professors and other interested parties. By providing data for use in the formulation of development plans, these bodies have been important mechanisms for integrating the social elements of plans into the total planning effort. In Ceylon, for example, the Technical Working Group on Skills, organized by the Planning Council Secretariat, made a detailed study of the requirements of skilled personnel and made appropriate recommendations, which were included in the ten-year plan.[50]

The alternative solution of concentrating the consecutive stages of planning work in special ministries rather than in boards and their subsidiary bodies still remains quite widespread, particularly in Latin America and in the Middle East. The difference between these two approaches to the organization of planning machinery is quite important. Where actual responsibility is assigned to a ministry, its activities usually remain not only under the over-all control of the political leadership of the State — which, of course, is also the case where planning responsibility is vested in a board — but also subject to frequent review by the Cabinet and thus to the influence of the ministers in charge of substantive government departments. In this way, the necessary compromises of day-to-day politics are in a position to intrude on planning work, a situation less likely to occur where such work remains the responsibility of a board selected from among experts and professional planners who are not currently participating in politics. Direct ministerial responsibility for planning work also may affect the continuity of planning, particularly where cabinet changes are frequent and where the difference between the political coloration of successive cabinets is significant. This is true even in dependent territories, where the responsibility of the legislative bodies is still largely limited to an advisory role but where the different views of successive heads of the executive (governors) are likely to have a strong influence on the orientation of development planning, as, for example, in the relative emphasis on economic and social expenditures.

In some countries of the Middle East, the advisability of freeing the organs primarily concerned with planning from preoccupation with problems of implementation and of day-to-day administration has resulted in the replacement of previously existing ministries of development — which dealt with both planning and implementation of projects — by ministries charged exclusively with planning work. In Iraq, for example, under the 1959 administrative reform, the Ministry of Development and the Development Board were abolished, their operational responsibilities transferred to the ministries concerned with the substance of the development programmes, and planning responsibilities vested in a new Ministry of Planning.

Some of the less developed countries have recently moved towards the decentralization of their development planning and administration. Although different methods have been applied in India, Pakistan, and the Egyptian region of the United Arab Republic, these countries are relying on local and regional bodies for the more detailed aspects of the planning and administration of social and economic programmes, and for the raising of part of the funds needed. General policy and guidance

[50] See Government of Ceylon, *The Ten-Year Plan*, p. 464; also "Planning for Social and Economic Development in Ceylon" (to be issued separately).

continue to emanate from the central planning agency and other agencies and can be made effective through the requirement of central approval of locally prepared budgets as well as through conditional grants from the central budget.

Administrative reforms aiming at improvements in the quality of work and efficiency of the planning systems are sometimes difficult to carry through, owing to the growth of vested interests — political, group and personal — around existing planning arrangements. In quite a few countries, attempts to reorganize the planning systems have resulted only in the creation of new organs, with the old ones retained. With or without nominal planning or co-ordinating machinery, the separate departments of Government may continue to operate in surprising isolation from each other. Under these circumstances, the redistribution of planning tasks has sometimes impaired efficiency even more; lines of responsibility have become blurred, and vague statements have sometimes emerged as the only fruit of the often disputatious co-operation between the various coexisting planning organs.

The preceding pages have indicated a wide range of methods of co-ordinating social and economic programmes, in countries that engage in formal development planning as well as in those that do not. The most nearly universal method is the preparation of the Government's annual budget, which implies some assessment of the relative advantages to be expected from alternative allocations of resources, although the criteria may not be expressly stated, and although the Government may not realize the budget's full value as an instrument of co-ordination. Many countries have set up more elaborate machinery for planning and co-ordination and have made increasing use of long-term projections and calculations of complementarities involving several social and economic fields. Another trend is apparent, however, in some of the countries that have been most committed to comprehensive planning; this trend is toward the simplification of planning machinery and the devolution of some planning responsibilities upon regional or local bodies. In fact, the broad responsibilities for development that Governments have assumed demand complex methods of co-ordination, but these methods are likely to become rigid and cumbersome unless they are constantly reviewed from the standpoint of flexibility and the promotion of local initiative.

Up to the present, the relative effectiveness of different administrative arrangements for this purpose has not been assessed through comparative studies. In particular, there has been no objective comparison of the experience of countries using various types of special administrative machinery for the co-ordination of social planning with economic planning at different levels and between levels, and those of countries without special planning machinery. While such studies could not be expected to result in blueprints applicable to any given country without modification, they might provide useful guidance for developing economies.

Chapter VI

CONCLUSIONS

1. The treatment of balanced social and economic development in the 1961 *Report on the World Social Situation* is preliminary and experimental. The Report does not attempt to set forth an ideal conception of balanced development with a recommended order of priorities. It undertakes rather to seek clarification of the concepts and questions involved, and to approach the problem of balance from an empirical point of view. The emphasis is upon the actual patterns of development of different countries, their budgetary allocations to economic and social fields, and the methods used to integrate economic and social development, rather than upon theories as to what balanced development ought to be. In this regard, it is hoped that further case studies of experiences within individual countries will broaden the empirical basis for understanding the interrelations of economic and social development. The conclusions that emerge from the present report are necessarily tentative, in the nature of hypotheses, subject to debate and to further research and analysis.

2. The question of balance between economic and social development can be considered from the point of view of the effects of activity in one field upon other fields, the mutual requirements for development across fields or sectors, the capacities of the economy to support particular social programmes, and the requirements of social justice. Much of what is said about balance between economic and social factors could be said equally about balance between different economic factors (e.g., industry and agriculture) or between elements within a single social sector (e.g., between primary and secondary education). The use of the terms " social " and " economic " in contra-distinction to each other may lead to a degree of artificially induced opposition which it would be unfortunate to encourage. There are, however, special difficulties of a conceptual and methodological nature that apply to the social factors in their relation to the economic factors, often leading to less than adequate consideration of these factors in economic development theory and planning.

3. As a rule, economic and social factors complement or support each other in the objective process of development. With certain exceptions, and in varying degrees, progress in any one field (industry, transportation, education, labour, welfare, health, etc.) tends to be held back by failure to advance in other fields. This is the well-known vicious circle — poverty begets ignorance, and ignorance begets poverty. Conversely, advance in any one field will, with some exceptions, be beneficial or potentially beneficial in other fields. The exceptions, however, are important. Advances in industrialization, for example, even while promoting employment and higher levels of living, may be accompanied by certain social problems which are not necessarily inevitable but which call for positive social programmes tied in with the industrialization process, and for institutional changes designed to maintain social cohesion and stability, as far as possible, in the context of economic development.

4. While, at the objective level, progress in any one sector will usually be beneficial to other sectors, there is also competition among sectors for the expenditure of available resources — competition for money and manpower, particularly skilled manpower — so that in this respect progress in one field can hamper progress in other fields. Thus, the construction of factories may absorb resources that could be used for housing and vice versa. At the family level, better housing promotes better health, but when low-income groups move into better housing and have to pay substantially higher rents, their level of health may in fact decline because they have less to spend on nutrition and medical care. Similarly, in the case of public expenditures, there are limits to investment in a given field beyond which further investment will appear to have, broadly considered, a negative net effect. Generalizations concerning competition for resources, however, like those concerning complementarity in action, require certain qualifications: resources obtainable for a given purpose through special means, as through special taxes or charitable donations or voluntary efforts, may not be available in practice for other purposes; the distribution of educated manpower in different fields may depend in most instances on individual choices, which can result in undesired surpluses in some fields, along with shortages in others; some of the most important social activities and reforms have relatively little reflection in expenditure.

5. In the strategy of development, a proposed programme in any particular field should be looked at from three points of view:

(i) Its value in the field in question;

(ii) Its value in terms of essential contributions or induced benefits (or possible disadvantages) in other fields;

(iii) The value of alternative uses of the same investment of resources.

Ideally, the problem of balanced development might be said to be the determination of a pattern of resource outlay (public and private, economic and social) such that the maximum contribution to over-all development (both economic and social) in a particular country would be achieved.

6. In practice, such a conception, while it can serve as a rough guide to policy, cannot be translated into precise objectives and quantitative terms, at least at present. There are two reasons for this:

(i) Uncertain knowledge regarding the cross-effects and implications of development in particular fields;

(ii) Difficulties of measuring economic and social effects in comparable terms.

7. Much has been learned in recent years about the interrelation of economic and social factors in development, and this knowledge can help to guide development policy. Various obstacles to development in the social scene are recognized (such as extreme inequalities in distribution of income and excessive concentration of land ownership), and much more attention is now being given to the role of the human factor in economic growth, including, for example, the crucial role of education. Conversely, economic development is now recognized as a central means of progress in human welfare; most economic development planning or programming is stated to have the ultimate social purpose of raising the levels of living of the population. Nevertheless, much has yet to be learned about the interrelations of economic and social development, especially as regards effects that are indirect and variable.

8. There is an important group of social programmes, including those concerned with distribution of income, social security and family welfare, where it is particularly difficult to observe a direct impact upon economic development. Yet such programmes may have significant indirect roles in helping to establish a climate favourable to economic growth. It is not possible to state such indirect effects in quantitative terms for comparison with costs, or to set up simple universal rules regarding their appearance, especially in situations where the elusive factor of human motivation is centrally involved. A social programme that has a positive effect on economic development in one context, because it strengthens morale and stimulates effort, may not have such an effect in another context and may do little more economically than drain off resources. In general, however, it may be said that the attitudes and aspirations of the various classes of the population and their feelings of integration and of participation in development are factors of very great importance for economic development in the long run — as are, correspondingly, social institutions as well as governmental programmes that serve to enlist or strengthen such participation and motivation for economic growth.

9. Whereas economic development is measured in monetary terms, social progress is not.[1] Social investments or expenditures that are designed to raise levels of living directly — e.g., expenditures on medical care, general education, family welfare and social security — may have social results that can be measured quite accurately, as through changes in mortality and morbidity rates or in literacy rates; but such rates are not convertible into monetary values. This fact, together with the difficulty of determining the economic results of "human investments", means that the values of different economic and social programmes (or of programmes in different social fields) cannot be compared in any precise manner, in terms of what the programmes accomplish for development as a whole.

10. Correspondingly, it is not possible to establish objective criteria of balanced social and economic development in the sense of employing a scientific scale by which a nation's health, education or welfare activity could be weighed, in conjunction with its economic circumstances, and found to be too little or too much or in perfect balance. Specific requirements across economic and social sectors — for example, educational or training requirements for given economic purposes — can be determined through techniques of development planning or programming, but no countries, including those with the most highly planned economies, determine their social standards in general, or their levels of activity in such broad fields as health, education and family welfare, simply by making quantitative analyses of an economic type. This does not mean that Governments, in their budgetary outlays, cannot and do not attempt to achieve a "balanced" set of allocations in deciding among alternative expenditure proposals; it means that such decisions, when involving social expenditures, cannot be based on analyses of input and output using a monetary, or any other unidimensional, scale. This is, in fact, no different from the use of the concept of balance in the medical and psychological sciences to refer to optimal relationships among factors that are quite differently measured — the optimal relationship is determined on the basis of empirical evidence. Governmental allocations for economic and social development, in the last analysis, are made essentially by political decisions within the context of available resources, but these decisions can benefit from various kinds of empirical data on the interrelations of economic and social factors.

11. While economic and social progress is not measured by a common scale, it is possible to compare and correlate the behaviour of economic and social variables and hence to construct a pattern or profile

[1] The view that levels of living and changes therein must be measured through separate statistical indicators of the different components (health, nutrition, education, conditions of work and employment, etc.), which cannot be combined or converted into a common scale, monetary or otherwise, was put forward and developed in some detail in the *Report on International Definition and Measurement of Standards and Levels of Living* (United Nations publication, Sales No.: 54.IV.5). The position taken in the present report on methodological questions relating to the measurement of social and economic development follows this point of view.

analysis of the levels of development of individual countries, indicating whether particular countries are more advanced or less advanced in measurable social components than other countries at the same level of economic development (or conversely, more advanced or less advanced economically for their level of social development). This, together with other types of data, may contribute to an empirical study of the problem of balanced development, and may yield information of interest to countries concerned with their growth pattern.

12. Such an analysis, which was attempted in chapter III of the Report, suggests that various economic and social factors do not necessarily have the same growth trends; health, for example, improves more rapidly today at the lower levels of development than at the higher levels, while the reverse is true of national income and energy consumption. Thus the gap between the more developed and the less developed countries is widening with regard to some indices and narrowing with regard to others.

13. The comparative analysis of the interrelationship of selected economic and social indicators in a large number of countries suggests the existence of "imbalance" where there is a particularly striking discrepancy between levels of the economic and social indicators. The social-economic pattern tends to reflect the internal distribution of income and services. Countries where economic indicators are much higher than the social indicators are frequently those countries with considerable inequality of income distribution. On the other hand, some high-income countries with a very high level of health appear to be countries with relatively narrow ranges of income distribution and particularly small differences between urban and rural incomes.

14. Comparative analysis of the pattern of national expenditures can also be attempted, as was done in chapter IV. Such analysis indicates that public social expenditure, as a proportion of national income, tends to have a positive rather than a negative correlation with public economic expenditure. There is a tendency for the percentage of the national income devoted to social expenditure to rise as the absolute level of income rises. Comparative analyses of public expenditure patterns are, however, particularly complex and difficult, owing, *inter alia*, to differences in coverage and classification. Costs for given services (e.g., medical services, school instruction) in their relation to other costs in the country may also vary widely from country to country, so that two countries with similar per capita national incomes may spend the same percentage of their national incomes on medical care or education, but the effects on levels of health or education may be quite different if these services are several times more expensive in the one country than in the other. While there are a great many statistical difficulties in the comparative analysis of budgetary expenditures, the subject merits further study, particularly in view of the importance of the national budget as an instrument for balancing and co-ordinating economic and social development.

15. Social programmes in many countries today are quite autonomous; there is often little consideration of their economic implications — and little consideration of the social implications of economic programmes. Once a given relative level of budgetary allocation for a particular field is established, it tends to be perpetuated. The traditional emphases given by different countries to particular social fields vary widely, partly no doubt because of differences in value systems, but partly also because of historical accident.

16. In development planning, social programmes that reinforce economic programmes have a special and strategic significance, as do programmes that economize on scarce resources and exploit idle resources (e.g., idle labour). Similarly, economic projects that are most likely to contribute to the solution of urgent social problems should have priority, other things being equal.

17. An increasingly important means of interrelating economic and social development is the use of projective techniques and similar methods of analysis which indicate what the requirements in other sectors will be, as a result of intended or anticipated developments within any given sector. The application of these techniques to the social field is still at an early and experimental stage.

18. In many countries, there is no specific machinery for the systematic review and evaluation of mutual implications of economic and social programmes. In other countries, such review and evaluation may be a main function of the planning machinery. In still other countries it is carried out as part of budgetary or legislative policy, or as part of the operation of a planning office that sets forth the implications of various policies. In countries with planned economies there has been a tendency in recent years towards decentralization and extension of the period covered by planning, while planning offices are being divested of any managerial and operational responsibilities in the economic or social fields. Evaluation of the effectiveness of different administrative arrangements for the planning and implementation of social development programmes in connexion with economic development programmes calls for further study at both national and international levels.