

Department of Economic and Social Affairs

**THE PROBLEMS AND POLICIES  
OF ECONOMIC DEVELOPMENT:  
AN APPRAISAL OF  
RECENT EXPERIENCE**



**World Economic Survey  
1967 – Part One**

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#### NOTE

Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

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## FOREWORD

This report, *World Economic Survey, 1967*, is the twentieth in a series of comprehensive reviews of world economic conditions published by the United Nations. It is issued in response to General Assembly resolution 118 (II), in which the Secretary-General was requested to prepare an annual review and analysis of world economic conditions and trends. The report is intended to meet the requirements of the Economic and Social Council and other organs of the United Nations for an appraisal of world economic conditions which may serve as a basis for recommendations on economic matters. It is also intended to stimulate interest in and discussion of international economic problems among a more general public audience.

Each year since 1955, the *World Economic Survey* has contained a study of a particular problem concerning economic development. Among the subjects examined have been economic growth in the first post-war decade, balance of payments problems in relation to economic growth, inflation, post-war commodity trade and policies, experience and policies relating to investment and saving, industrialization and economic development, foreign trade and economic development, the appraisal of development plans, the financing of economic development, and problems in the implementation of development plans.

Part One of the present *Survey* examines the principal features of economic progress of developing countries during the period 1955 to 1965. As part of the preparatory work for a second United Nations Development Decade, this review seeks to draw certain pertinent lessons from the recent experience relating to problems and policies of economic development. It is hoped that the *Survey* will

provide a helpful background to discussions in United Nations forums on designing a concerted programme of action for the 1970's.

Part One of the *Survey* consists of an introduction and five chapters. The first chapter contains an empirical examination of the dimensions and diversity of recent achievements and problems. The second chapter examines in some detail progress and problems encountered by developing countries in the principal sectors of economic activity, particularly in agriculture and industry. The third chapter is devoted to a consideration of problems of mobilizing both human and financial resources for accelerating economic development. The fourth chapter considers the recent planning experience of developing countries, with special emphasis on the use of the various policy instruments available for implementing plans. The final chapter examines some of the features of the international economic environment in which efforts to promote development are taking place.

Part Two of the *Survey*, which is issued as a separate volume, deals with the main features of the world economic situation. It consists of three chapters. The first covers the growth of output and trade and changes in the allocation of resources in 1967 and early 1968. The second chapter examines in some depth several topics of current concern in the fields of international monetary and trade policy, commercial policy developments and regional integration. The final chapter examines recent progress in economic reforms in eastern Europe.

The *World Economic Survey* is prepared in the Centre for Development Planning, Projections and Policies of the Department of Economic and Social Affairs of the United Nations Secretariat.



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## Explanatory notes

The following symbols have been used in the tables throughout the report:

Three dots (...) indicate that data are not available or are not separately reported

A dash (—) indicates that the amount is nil or negligible

A blank in a table indicates that the item is not applicable

A minus sign (—) indicates a deficit or decrease, except as indicated.

A full stop (.) is used to indicate decimals

A comma (,) is used to distinguish thousands and millions

A slash (/) indicates a crop year or financial year, e.g., 1960/61

Use of a hyphen (-) between dates representing years, e.g., 1961-1963, signifies the full period involved, including the beginning and end years.

Reference to "tons" indicates metric tons, and to "dollars" (\$) United States dollars, unless otherwise stated.

The term "billion" signifies a thousand million.

Annual rates of growth or change, unless otherwise stated, refer to annual compound rates.

Details and percentages in tables do not necessarily add to totals, because of rounding.

The following abbreviations have been used:

AsDB	Asian Development Bank
EDF	European Development Fund
EEC	European Economic Community
EIB	European Investment Bank
EPTA	Expanded Programme of Technical Assistance
GATT	General Agreement on Tariffs and Trade
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IDB	Inter-American Development Bank
IFC	International Finance Corporation
IMF	International Monetary Fund
OAS	Organization of American States
OECD	Organisation for Economic Co-operation and Development
SITC	Standard International Trade Classification
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme

UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFC	United Nations Fund for the Congo
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNRWA	United Nations Relief and Works Agency
UNTEA	United Nations Temporary Executive Authority [West Irian]
WFP	World Food Programme

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of its frontiers.



## INTRODUCTION

For the world as a whole, the past twenty years have constituted an era of unprecedented economic growth. It is certain that more people have been involved in and affected by the process of development during this period than at any other time. And it is probable that the rate of increase in incomes has been higher and more sustained than ever before.

Yet the end of the period has found the world community more conscious than before of the disparities between countries and between groups within countries. The least favoured at the outset have been least able to turn to good account the forces making for economic progress. So that, notwithstanding achievements quite remarkable by historical standards, many of these groups and countries have experienced a relative deterioration in their position.

An appraisal of the performance of the less developed countries has to be made in the global setting, not for the sake of the bench-mark provided by progress in the more advanced areas but because these areas constitute the market for most of their exports and the source of much of their capital, both in the form of expertise and technology and in the form of plant and equipment. To state that economic development in the low-income countries is contingent to a degree on the growth of the higher-income countries may tend to de-emphasize the disparities, but it also serves to bring out the special responsibility vested in more advanced countries.

### THE EMERGENCE OF POST-WAR DEVELOPMENT STRATEGIES

Many of the ideas, techniques and institutions that have shaped the development strategies of the past twenty years were evolved in the post-war recovery period. In western Europe, the movement towards economic integration fostered by the Marshall Plan assumed tangible institutional forms in the case of steel and coal and atomic energy, and, by the end of the 1950's, in a full six-nation common market. More generally, the momentum generated in the determined reconstruction effort in the second half of the 1940's was sustained by a number of loosely connected forces and circumstances—some fortuitous and transient, others more purposeful and permanent—through the 1950's and into the 1960's. In the early part of this period, the backlog of demand was gradually released on the market and the backlog of technological innovations was absorbed into civilian industry. The latter process con-

tinued throughout the period; indeed, the accelerated pace of technical change has become one of the essential characteristics of the contemporary world. Many problems have been eased or solved as a result, but the task of decision making has also been complicated, especially in the low-income areas where the relevance of many of the innovations is difficult to determine.

Less tangible but no less significant was the advance made in the science and art of regulating a national economy. Formally, as in the case of the 1946 Employment Act in the United States, or informally, Governments had adopted "full employment" as a prime national goal and in varying degree had begun to use their fiscal and monetary powers much more actively as instruments for affecting the pace and direction of over-all economic growth as well as for maintaining internal and external balance in the economy. This movement towards more deliberate economic management of national economies was strengthened by international consultation and confrontation procedures designed in the first instance to facilitate reconstruction, then to guard against the transmission of deflationary tendencies and finally—in line with the greater degree of interdependence of the world economy—to subject national measures to the test of their implications for partner countries and the rest of the world.

While few countries were able to commit themselves to a specific full employment target—that is, a specific limit to the rate of unemployment—many did in fact bind themselves to a code of behaviour in the field of trade relations. Under the General Agreement on Tariffs and Trade (GATT), contracting countries set about liberalizing international trade, and the process of negotiation and confrontation, begun in 1947, continued to exert a positive influence on the course of trade throughout the 1950's, culminating in the so-called Kennedy Round of tariff reductions concluded in 1967. Given the generally favourable demand trends and the division of labour flowing from the increased pace of technological change, the scaling down of tariff barriers helped to promote a continuous and rapid increase in international trade.

In addition to the consultation forum provided by the United Nations and the negotiation machinery provided by GATT, the institutions created at Bretton Woods furnished banking-type mechanisms

which greatly facilitated adjustments when ordinary payments arrangements got out of line.

Thus, notwithstanding the serious ideological split in the world economy and the recurrence of active hostilities in various times and places, the degree of co-operation among nations was notably greater after the Second World War than after the First. The impact of domestic economic policies on the rest of the world has been taken into account much more systematically and seriously: the world has enjoyed relative freedom from the *sauve-qui-peut* attitude towards economic imbalances that precipitated the Great Depression at the end of the 1920's.

One aspect of this enlarged awareness of the interdependence of the world economy was evidenced in a heightened concern about disparities in income, both within countries and between countries. The increased interest in the problems of economic dynamics and growth took on a special form as previously non-self-governing territories achieved political independence and began to adopt policies designed to accelerate the pace of their economic development. The more advanced countries, which, in the Atlantic Charter and then in the United Nations Charter, had committed themselves in a general way to strive to raise world levels of living, began to organize more specific programmes of technical assistance, such as Point Four in the case of the United States and the Colombo Plan for co-operation in southern and south-eastern Asia in the case of the United Kingdom. In the second half of the 1950's, as the imports of the developing countries rose and their export prices and foreign exchange reserves declined from high post-war levels, this assistance took on more of a financial nature: the movement of private capital was supplemented by a flow of official lending, both bilaterally and through international agencies, mostly to finance investment projects.

#### INTERNATIONAL DEVELOPMENT TARGETS

The desirability of expanding and systematizing the transfer of resources from the more advanced countries to the less advanced was given unprecedented international endorsement in 1960 when the General Assembly adopted resolution 1522 (XV) setting a target of 1 per cent of the national income of the former for the total of such transfers. This was followed in the next session of the General Assembly by resolution 1710 (XVI) declaring the 1960's a "decade of development" and adopting another target, namely, a minimal 5 per cent as the annual rate of gross domestic product growth to be reached by developing countries before the end of the decade.

Events have cast doubt on the adequacy of these targets—not only on the magnitudes chosen but also on the way in which they were denominated and

on their simple but ambiguous arithmetic—but as tangible expressions of need and intention they represent unprecedented landmarks in international economic policy. Though their impact and significance have differed considerably from one country to another, there can be little doubt that their over-all effect has been stimulating: without the debates and discussions they have evoked, in both national parliaments and international forums, the effort made by the more advanced countries to provide resources and the effort made by the developing countries to raise their growth rates would probably have been appreciably less than in fact they have been.

While they epitomize the common concern about disparities in income and economic viability, these targets do not furnish bench-marks against which progress can be meaningfully measured. The resource transfer target is too aggregative and too donor-centred to provide a means of assessing the value or effectiveness of the transfers actually made. The growth target is too absolute and too simplistic to be used for appraising achievements in the complicated process of development.

The fact that among the sixteen principal developed market economies over the period 1961-1966, for example, the highest performance in respect of the resource transfer target fulfilment was about eight times the lowest is by no means an accurate reflection of the range in the resultant development impact of the transfers.<sup>1</sup> For, apart from the diversity of the nature and form of the transfers and the pricing and quality differences subsumed in the single target figure, the impact of any transfer depends on its appropriateness to the purpose on hand in the recipient country.

Efforts to take the quality of transfers into account have continued. In 1965, two subsidiary targets were recommended by the Development Assistance Committee of the Organisation for Economic Co-operation and Development for the terms of official lending—interest rates, grace periods and maturities—and another for the progressive reduction in the degree of tying of loans to specific commodities or countries of supply. The desirability of a target for the official component of resource transfers was discussed at the second United Nations Conference on Trade and Development (UNCTAD). And it has been suggested that a target that was net of returning flows of investment income and a target for the grant component of official loans would also be useful. In general, the search has been for a set of targets that would provide simultaneously a satisfactory measure of the volume and usability for develop-

<sup>1</sup> On the average, the net outflow (including government-guaranteed export credits) amounted to about 0.7 per cent of gross national product. The lowest ratio was less than 0.2 per cent, the highest almost 1.6 per cent.

ment of the resources provided and the real cost to the donor country.

Similar problems have arisen in applying and interpreting the growth target. There has been an even wider range of performance among the developing countries. In the period 1955-1965, for example, the spread of gross domestic product growth rates was from zero to almost 20 per cent *per annum*. Among the high-growth countries, the crucial factor was often a single export industry, in many cases foreign-owned; among the low-growth countries, a frequent factor was a change in political régime or other non-economic disturbance, accompanied in many cases by the flight of capital. In these circumstances, a single measure of output is a poor guide either to the development effort that is being made or to the country's capacity for future growth.

A 5 per cent target would not appear to represent much of a challenge to a country whose growth rate already exceeds that figure, yet half of the twenty-five developing countries whose 1955-1960 growth rate was about 5 per cent recorded a rate below 5 per cent in the following quinquennium, and in most of these cases the rate was more than halved. Thus the attainment of a 5 per cent growth rate over a five-year period is by no means conclusive evidence that a firm foundation for the continuation of a satisfactory rate of progress has been laid. Contrariwise, half of the twenty-five countries whose 1960-1965 growth rate was above 5 per cent had grown at less than that in the preceding quinquennium, and in about half of these cases the rate had been more than doubled. The gross domestic product has tended to be a very unstable indicator.

To appraise the progress a country has been making thus requires more than a review of the course of total production or even of changes in the structure of production, including such crucial features as the relative contribution of agriculture and industry and the course and composition of exports and imports and the external balance. No less important than the rate of over-all growth is the pattern of investment and the structure of the productive capacity that is being built up, the creation and transformation of institutions so as to liberate and stimulate the energies of producers in the economy and the improvement of human resources in ways that raise not only living standards but also the productivity of labour. Even countries registering identical over-all growth rates may be achieving quite disparate results in terms of structural and institutional changes. This may reflect basic differences in their economies or in their goals and policies or even a failure to appreciate or come to grips with some of the less tangible problems whose consequences are not readily measurable or immediately discernible. Nor can the significance of identical average rates of growth in income be assessed without some infor-

mation concerning its internal distribution: differences between the "modern" and the "traditional" segments within an economy and between the rich and the poor within the modern segment are often wider than those between countries.

The fact is that beyond the typically low degree of industrial specialization the developing countries are characterized more by their diversity than by their uniformity. Even the range of *per capita* income is extraordinarily wide: the average for the richer countries (Argentina, Israel, Kuwait and Venezuela, for example) is about twenty times greater than the average for such countries as Burma, Ethiopia or Malawi. The differences in the nature of the development problem between the Gambia and India, between Bolivia and Indonesia, between Mexico and Somalia are so obvious and so great that it is only with the greatest circumspection that averages and aggregates can be deployed to depict the course of events in what is sometimes called the Third World.

These enormous national disparities notwithstanding, two facts still have to be borne in mind: one is that though there are even greater differences within many of the developing countries, yet the decision-making organs of government are faced with the responsibility of national policies. The other is that certain obstacles to the development process, however this is defined, recur so frequently and in so many different circumstances that they constitute a set of common problems. In essence, these are the obstacles that prevent or slow down the process of raising the productivity of labour by improving the quality and use of human resources and equipping workers with capital in appropriate form and amount to permit a higher degree of specialization, and with it a transformation of the structure of the economy.<sup>2</sup>

## HUMAN RESOURCES

Human resources play a dual role in the process of economic development: they are both the end to

<sup>2</sup>Obstacles to economic growth that stem from the dearth of physical resources and from military action or civil strife and the consequent lack of a viable government capable of formulating and implementing any development strategy have not been considered in this *Survey*. This omission does not reflect on their significance as inhibitors of growth—they have in fact constituted major difficulties in many developing countries in the post-war period—but is recognition of their uniqueness to the country and the time.

A country that lacks natural resources is likely to be too poor to take all the steps that might be taken to improve matters—mineral surveys, desalination of sea or brackish water, weather modification through afforestation and so on. The rest of the world can obviously contribute greatly to the development of such a country by assisting it with the technical means of searching for new resources and improving its known physical endowment.

A country that is racked by warfare may also try to foster its own economic development. But in the circumstances, neither the measures it enacts nor the ways in which they work out in the field are likely to yield many useful lessons to developing countries facing the development problems of a civil economy.

which the effort is directed and the means by which it is carried out. The emphasis in the present context will tend to be on the worker rather than the consumer. This reflects the fact that development itself has a time dimension, being concerned so greatly with the creation of facilities and conditions that will contribute to a stream of income in the future.

At the root of the human resource problem lies the demographic question of numbers. Control over disease vectors has brought about an extremely rapid decline in death rates and because birth rates have not changed much, the developing countries are in the midst of an unprecedented upsurge in population. In the first half of the 1960's birth rates and death rates and rates of natural increase all averaged about twice as much in the developing countries as in the more advanced countries, and the annual increment in the population of the developing countries rose from 15 million in 1930-1950 to 28 million in 1950-1960 and 37 million in 1960-1965—24 million in Asia (other than mainland China) and the rest more or less equally divided between Africa and Latin America. This expansion—and the associated juvenescence—of the population has added considerably to the task of at least maintaining *per capita* levels of consumption and training necessary to sustain, and if possible raise, average productivity.

As successive censuses and demographic surveys have brought home the arithmetic facts, more and more Governments have taken active steps to bring fertility into more tolerable balance with the new mortality experience. The techniques for accomplishing this have improved very greatly in recent years, but the physical problem of making them available and the psycho-social problem of making them acceptable pose a new challenge to most countries. As Governments have no direct means of bringing about family planning, it is all the more necessary for official instrumentalities to be deployed consistently in support of population controls: minimum constraint on the production and importation of the required medical and para-medical personnel along with appropriate wage scales to attract them to the rural areas where the need tends to be greatest. Some countries have found it helpful to offer some financial incentive for participation in the family-planning programme.

Productivity can be maintained only if employment opportunities are adequate. This is partly a question of the education and training of workers in line with the pattern of demand and partly a question of the supply of complementary factors of production. The former imposes a harsh choice on many developing countries: education as an end, raising the quality of life, may have to be postponed in favour of training as a means of operating the more com-

plex economy emerging from the development process. The latter also involves hard choices, implicit in the need to extend the division of labour and diversify the economy: in many ways the three major productive sectors—agriculture, industry and infrastructure—compete for the available manpower resources, not only among themselves but also with commerce and public administration. Recent experience in a number of developing countries has shown that strong preferences for the traditional professions and for so-called white-collar work in general can exercise quite a distorting influence on the structure of education and hence on the output of the schools. In general, it is skills in the science-based subjects, in engineering and in the practical tasks of a mechanizing economy that tend to be in shortest supply.

Even when a developing country has reconciled itself to the view of education as a development tool, the problems of providing it in an optimal way remain formidable. Where there is a strong desire for literacy, it cannot be summarily brushed aside; but priority may well be given to the areas in which literacy is likely to contribute most to productivity—farmers who are the subject of a cultivation-improvement campaign, for example, or factory workers who may have to follow written instructions. The task of making the profile of the educational structure—primary, secondary, higher and vocational, as well as the curriculum followed at each stage—conform as closely as possible to the projected needs of the economy is a continuing challenge. So is the task of providing appropriate inputs in the form of properly located and equipped facilities and well-trained teachers. This is another field in which the setting of an over-all money target—the expenditure of a given proportion of the gross national product, for example—may not achieve its purpose unless it is accompanied by a well-considered determination of the direction and composition of the requisite effort.

#### RAISING PRODUCTIVITY

Though the process of economic development is essentially a matter of raising human productivity, it cannot go very far without organizational changes. To make even the simplest traditional tasks of producing food, clothing and shelter more efficient requires the regrouping of human effort in more specialized and more closely co-operating teams. And while the process has to begin with the traditional tasks, it soon involves new products and new forms of productive organization based on interindustry relationships which tend to grow more complex. Underpinning the whole structure in almost all developing countries is the agricultural sector, the oldest and often the most difficult to adapt to the changing needs.

Of all the lessons to be learned from recent development experience, probably the most important is that agricultural adaptation is not an automatic process which can be left to work itself out under the impact of other social and economic changes. The raising of agricultural productivity must be consciously pursued and it is fundamental to the whole development process.

The problem of inducing a satisfactory rate of growth in the agricultural sector is not merely a matter of providing for a due allocation of resources. It also involves social and institutional questions which are deeply imbedded in the fabric of rural life, as well as technical questions, to some of which satisfactory answers are not yet known. For most developing countries, economic progress depends on the movement of workers from the land to productive employment in other occupations. For this process to succeed, not only must complementary factors be available in these other occupations but agricultural output must be made to expand adequately—that is, to meet the needs of the economy as a whole—with relatively (and perhaps in the longer run, even with absolutely) fewer workers. And, in this respect, agriculture occupies a crucial position: not only does it constitute the largest productive sector in most developing countries, so that its performance is a major determinant of over-all rates of growth, but it provides the essential flow of food-stuffs and raw materials—and by extension, income, savings and foreign exchange—any lag in which soon throws the economy out of balance.

It is because of this crucial role in the development process that the recent agricultural performance of developing countries, though good by historical standards, has been less than adequate for contemporary needs and in the light of other changes. In the period 1955-1965 only a small proportion (probably less than a fifth) of developing countries registered a growth in agricultural output of under 2 per cent a year; and there were as many with rates above 3.4 per cent as there were below that figure. This was a better achievement than that of the more advanced countries; yet, because of the low level of nutrition characteristic of so many developing countries, the great acceleration in population growth, the fact that such populous countries as India and Indonesia were in the group with declining *per capita* food production, the rise in incomes induced by the development process, the rapid growth in the demand for food outside the agricultural sector and the urgent need to enlarge and tap farm savings, it was far below the expanding requirements of a dynamic economy. The change is epitomized in the swing in cereal trade: from net exporters of over 14 million tons a year in the quinquennium before the war, the developing countries had become net importers of almost 11 million tons a year in the first half of the

1960's. In many of the developing countries, agriculture has begun to exercise a serious drag on the course of development.

The movement of workers from cultivation of the soil to other occupations has been commonly designated industrialization, but recent experience in the developing countries has shown that the assumption of a dichotomy between agriculture and industry tends to lead to an undue concentration of policy makers' attention on the latter with its new problems and a neglect of the former where the problems are tacitly assumed to be old and familiar. It is only when the organic relationship between farming and manufacturing is fully recognized that the problems of agricultural adaptation can be approached as part of a coherent development strategy. In this context, an industrialization programme, far from competing or conflicting with agricultural development, might consist in large measure of projects designed to industrialize agriculture: where parents worked on the land shaping yokes for oxen, gathering manure, carrying water, winnowing grain, weaving storage baskets, children might be expected to serve agriculture from mills and factories, producing tractors, nitrogenous fertilizers, pumps and pipes, meal and flour, cement and silos.

In this process, the industrial establishments and their workers constitute the market for the farm products, while the farmers constitute the market for the output of the factories. Due allowance being made for exports, there is thus an obvious need for balance between the expansion of industry and the expansion of agriculture. Given this interdependence, a lag in one sector can slow down the whole development process: weaknesses in agriculture have been responsible not only for initiating or accentuating inflationary tendencies but also for aggravating the market-based difficulties of many industries.

The introduction of new agricultural technology poses its own problems—unsuitability of tenure systems and land distribution, imbalances among the various inputs that together permit the new methods to be practised, lack of credit for more capital-intensive farming, absence of insurance arrangements to persuade conservative peasants to accept the risks of innovation, inadequacy of storage and marketing facilities, unattractive ratios of output prices to the cost of inputs. Whatever combination of such difficulties is encountered—and this has varied from country to country—the common source has been a failure to articulate all relevant policy measures and deal with the development process within a single integrated framework.

Where diversification of the economy is under way, the need to increase agricultural output per man is an imperative. In the new industries, on the other hand, output per unit of capital employed tends to

be a more important consideration. Here, market limitations influence, and sometimes dictate, the choice of technology. Where domestic demand is insufficient to sustain even one optimum-sized unit, production must be either partly export-oriented or protected from lower-cost imports, and neither course is without its risks and difficulties.

To be successful, an export-oriented industry must be able to compete with producers in larger or higher-income markets or have access to other small markets still importing the product in question. Neither alternative has proved to be a ready solution; hence, on the one hand, the widespread concern about obtaining some tariff preference for manufactures seeking entry into the more advanced countries, and on the other hand, the continuing efforts to bring about the integration of contiguous economies and the formation of subregional common markets.

Nor is the use of protective measures without its particular dangers to a developing country: unless the protected industry grows at a satisfactory pace, improving its competitive status, it may contribute significantly to a higher domestic cost structure, especially inimical to export activities and, as indicated above, to agriculture and hence to the economy's external balance. There are signs that this is what has been happening in many Latin American countries after a period of intensive import substitution.

In most developing countries, acceleration of the diversification process depends heavily on the effectiveness of official incentives to private entrepreneurs. In the case of some industries, however—particularly those in which a viable plant involves a large investment—Governments may themselves have to, or choose to, play the entrepreneurial role. This is pre-eminently true of projects that collectively constitute the economy's so-called infrastructure—power, transport, communications, irrigation, schools and hospitals and other social overheads. Because of their cost and scope, such projects have to be scheduled with particular care, bearing in mind not only the demand constraint stemming from the size of the market but also the indivisibility stemming from the size of the plant, and in many cases their interdependence: an irrigation project may be justifiable only in association with a hydro-power plant which in turn may require the justification of suitable industrial users, appropriately linked by transport facilities.

Keeping infrastructure up to, but not too far ahead of, requirements has become an important development art. Many of the structural and technological changes that are needed in the economy—particularly in agriculture—are contingent on the availability of transport, and power supplies can have a

catalytic effect on productivity. Judiciously timed and spaced, such overhead investment can be a major stimulus to growth. Yet, in itself, much of this infrastructure may add little or nothing to the supply of goods and services that determine the level of living. A high capital-output ratio—and recent years have seen many cases of incremental figures twice or even three times as great as the 3 to 4 average that is more typical of the developing countries—may reflect an investment pattern that is quite out of line with the pattern of resource availabilities and the need to absorb as many workers as possible in more productive employment.

This is one of the reasons why rapid urbanization constitutes so awkward a problem in many developing countries. Concentration of population is, to a degree, a concomitant of industrial development, and the provision of the appropriate infrastructure is an essential part of the process. But if the urban infrastructure runs too far ahead of what is available in the rural areas, it may in itself act as a magnet on the rural population. As an urban community cannot survive without the "overhead" facilities necessary to maintain health, movement, order and security, a rapid townward drift can absorb a large volume of investment with little relative advantage to real consumption. In many developing countries, the growth of major cities, with working-age population well in excess of employment, is less the result of a deliberate policy than a manifestation of a failure to provide for the structural changes that the process of development requires in the agrarian sector. The result is often an unduly wide disparity in income both within these large cities and between the city and the rural areas.

In many ways, these cities epitomize the problem of economic development in a poor country in a shrunken world. They constitute the chief points of contact with the more developed economies; their peoples have access to all the modern means of communication—indeed contacts may often be closer with the outside world than with the cities' own hinterland—and they aspire to the levels of living characteristic of countries with average *per capita* income many times greater than that of their own country. Their expenditure patterns exert a disproportionate effect on the composition of domestic production and of imports; they also influence the course of domestic savings.

It is for these reasons that special significance attaches to the extremely rapid growth of urban population: it has been about double the average rate in recent years. Moreover, the proportion of developing country population living in large cities (of over 500,000 persons), which doubled in the course of the 1950's, is now estimated to be increasing at about 6 per cent a year—over twice the over-all rate of population growth and three times

the corresponding rate in the more advanced countries. In view of the dearth of capital in most of the developing countries, such an expansion may not signify a comparable rise in productivity. On the contrary, the very effort to keep up with the provision of city overhead may serve to divert capital from more productive deployment in other areas.

#### MOBILIZING RESOURCES FOR DEVELOPMENT

The process of economic development is, in essence, a continuous series of structural changes by which human resources are adapted and equipped for a greater degree of specialization of function and effort, agriculture is made more productive, manpower is transferred to non-farm occupations, particularly in industry, and provision is made for the appropriate infrastructure for a more diversified economy. The process is not readily divisible into discrete and separately manageable phases; it is a continuum, and lags that cause imbalances at one point soon tend to be reflected in imbalances at other points. Nor is the process in any one country a closed or self-contained system; it is subject to an endless barrage of impulses from the rest of the world, not all of which facilitate the requisite changes.

Of all the possible causes for lags and imbalances in the development process, the most common among the developing countries in the post-war period have been deficiencies in investment and in imports. In varying degree, all the transformations which constitute development are contingent upon the amount and suitability of investment and the availability of supplies of the requisite imports. Thus, viewed from the financing side, the pace and smoothness of economic development depend very largely on the adequacy of domestic savings on the one hand and foreign receipts on the other.

In low-income societies, the difficulty of generating savings is always likely to constitute a constraint on the rate of growth. Most of the developing countries are characterized not only by low average incomes but also, as indicated above, by high rates of population growth which greatly accentuate the problem of increasing *per capita* savings and hence the amount of capital equipment at the disposal of each person. Nor does the skewness of income distribution, found in so many developing countries, serve to raise saving rates in the way it tends to do in higher-income countries: paucity of investment opportunities and the rudimentary nature of the local capital market both militate against the beneficial deployment of personal incomes. Moreover, the higher-income group in the developing countries is peculiarly vulnerable not only to the so-called "demonstration effect" persuading it to maintain levels of consumption more appropriate to an ad-

vanced economy than to an under-developed one but also to the temptation to transmit resources abroad, even in circumvention of official restraints.

Business enterprises, particularly corporate bodies, have shown themselves to be a more promising source of savings in recent years. But their impact is limited partly by the slow growth and spread of this form of organization, partly by the paucity of financial intermediaries capable of channelling such savings to the most productive uses and partly by the fact that many of the major corporate enterprises are foreign-owned, so that their savings become available to the economy, if at all, only as foreign investment.

Governments have hitherto played a much smaller role in generating savings than might seem consistent with their predominant part as planners and executors of development programmes. The explanation lies partly on the revenue side and partly on the expenditure side: there are special difficulties in expanding the former and in contracting the latter, so that the opportunities for accumulating current surpluses for use in public investment tend to be very circumscribed.

In most developing countries, because of the lowness of income levels, Governments are faced with a relatively narrow tax base. Administrative difficulties tend to constrain it even further, so that, in many cases, it is linked very closely to foreign trade: taxes on commodities moving inwards or outwards or on the incomes of those engaged in growing, mining or trading in such commodities. Whereas the progressive income taxation that is common to more advanced countries tends to make government revenue very responsive to economic growth, in the developing countries tax revenue tends to be not only rather inelastic relative to total production but also extremely vulnerable to changes in world markets.

On the expenditure side, most Governments find themselves in an equally tight situation. Their responsibilities tend to vary inversely with the state of development so that it is often the poorest that are called upon to take the initiative and provide the most services. It takes an unusually strong administration to refuse the claims and appeals of an aspiring electorate. When the services are obviously in line with the development needs of the economy (as in the case of schools and hospitals, for example), recent experience has shown that it is very easy to enter into commitments (perhaps only implicitly, as in the erection of buildings) which are embarrassingly difficult to fulfil in terms of subsequent current expenditure. The very fact that special responsibilities rest on the public sector not only for stimulating and sponsoring development activities but also for implementing many of them

tends to swell the general administrative costs of government. Budgetary flexibility and the capacity to generate a current surplus are also affected by the need to service debt, particularly in cases where the proportion of non-revenue-producing infrastructure has accounted for a large proportion of government borrowing and investment.

Notwithstanding all these difficulties the great majority of developing countries did succeed in raising their savings ratios in the course of the ten years, 1955-1965; about half, indeed, increased the rate by more than 3 per cent of their gross domestic product, and one-third by more than 6 per cent, and in the aggregate, the rate had risen from about 12 per cent of gross domestic product in 1955 to 14 per cent in 1965. Despite this improvement, however, in 1963-1965 only about a fifth of the developing countries recorded average savings rates—20 per cent of gross domestic product or more—approximating those common in the more advanced countries, and these included the major exporters of petroleum. A higher proportion—about a fourth—of the developing countries still had savings rates of under 10 per cent. On a *per capita* basis, the range of performance remained very wide—from less than \$10 per person in some of the poorer countries of Africa and Asia to over \$100 per person in some of the higher-income countries of Latin America.

Most developing countries have found it necessary to augment their own savings by drawing on the savings of the rest of the world. The balance of payments deficit through which this is accomplished, however, is often less a reflection of any official decision to tap external resources than of a failure of the economy to generate the required exports or of the world market to maintain the price level of those exports. With the outstanding exception of those countries with exportable mineral resources—particularly petroleum—most developing countries have experienced considerable difficulty in expanding their export earnings at a rate commensurate with their import requirements.

To some extent this difficulty has had its origin in production problems in the traditional export sector, but more significant in most cases has been the fact that the great majority of the export products of the developing countries—especially the traditional agricultural commodities—have faced slow-growing markets responsive neither to increases in income nor to reductions in price. This has proved particularly difficult for countries supplying a major proportion of the market for their leading export commodity: attempts to increase to any significant degree the volume of their exports of the item in question have tended to reduce its price and hence threaten their receipts. Nor has it proved easy for a developing country to change the structure of its

exports in favour of goods in more buoyant demand, for, apart from the difficulty of producing new commodities at competitive costs, access to external markets has often been obstructed—by trade policies pursued in partner countries, by ignorance of opportunities and conditions in distant foreign markets and by the absence or inadequacy of the various commercial mechanisms through which goods are moved and financed.

Over the ten years 1955-1965, the exports of the developing countries have increased in total value by an average of 4 per cent a year—the manufactured component (including metals) by 8 per cent, fuels by 7 per cent, food-stuffs by 3 per cent, raw materials by 2 per cent. As with every other variable, the average subsumes a considerable range of performance, from declines in such countries as Brunei, Burma, Cambodia, Colombia and Singapore, to gains of over 10 per cent a year in China (Taiwan), Iran, Israel, Jordan, Liberia, Libya and the Republic of Korea. Nor were these differences the result of price changes (the spread of export quantum data was very similar); they reflect chiefly the lag in agriculture at one end of the spectrum and a high mineral-manufactures content at the other.

By modifying the international division of labour, the process of economic development will itself tend to diffuse the pattern of world trade: new trade flows will expand and traditional flows contract. But the growth of trade among the developing countries which is implicit in this transformation has been shown by recent experience to be a far from assured and automatic progression. The growth of nationhood in the post-war period has tended to reinforce, at least temporarily, the competitive relationships among developing countries. Development objectives and the planning mechanism for formulating and implementing them have almost inevitably been national in scope and content, even when the national unit has been too small to sustain a significant degree of industrial diversification. Only through deliberate linking of trade arrangements and investment decisions is a viable industrial structure likely to emerge and that implies a degree of economic integration of small economies that may take a considerable time to achieve.

Even such market-widening integration would not reduce the need of the developing countries concerned for foreign exchange; indeed an acceleration in investment and intra-trade would probably enlarge the requirements that could be met only by imports from the more advanced countries. For at the root of this aspect of the development problem is the structural deficiency of most of the developing countries in respect of capital goods production. While economic integration of the smaller economies

may be essential for the establishment of viable capital goods industries, the very effort to build up such industries is likely to increase the demand for imports.

This phenomenon has been a feature of even the largest of the developing countries, notwithstanding the capacity of such economies to provide a sizable share of the capital goods required for their own development. Indeed, under the impact of the "demonstration effect" in respect of consumer goods and the rapid change in technology in respect of producer goods,<sup>3</sup> it is these larger countries that have most consistently underestimated their propensity to import. In recent years, their balance of payments has remained most precarious and foreign exchange stringency has exercised a major constraint on their economic growth.

#### THE PLANNING FUNCTION IN DEVELOPMENT

With domestic savings and foreign exchange both in short supply, the task of increasing average productivity and bringing about the structural changes necessary for continued expansion in output and incomes poses formidable problems of economic management. The specific form and nature of the problem differ from one developing country to another depending on the existing structure of the economy, the relative magnitude of the constraints, the choice of objectives—immediate and more distant—and the range and force of impulses received by the economy from the outside world. As more countries have attempted to set explicit objectives and to plan ways and means of attaining them, however, various common difficulties have become apparent. Some relate to the adoption of a development strategy, some have arisen out of organizational problems; some from the sheer accumulation of past measures of an *ad hoc* and sometimes conflicting nature. Others stem from conflicts between short-term needs and longer-term goals and yet others from the bluntness of certain policy instruments, particularly when they are used in an environment that may be sluggish in transmitting economic stimuli. The two most frequent difficulties encountered by developing countries in the formulation of a development strategy have been the identification of the principal obstacles to economic growth in a manner that is operationally useful, and the method of dealing with, and if necessary circumventing, particularly recalcitrant obstacles.

The need to identify bottle-necks and to appreciate their amenability to corrective action are essential to the determination of priorities and hence to the

content and phasing of a development plan. Recent experience has demonstrated how easily bottle-necks may be generated in an economy in which most types of resource are under strain. Lags ripple through the economy, reducing productivity and raising prices, and sometimes cumulating in an extremely disruptive manner. Not only is the pinpointing of potential bottle-necks an essential preliminary to the determination of priorities for planned development but a constant alert has to be maintained for the emergence of imbalances in the course of the plan. The lags whose probability has been most frequently underestimated by developing countries in the past have been in exports, in domestic food supplies and in the skills required in the course of industrialization. But in varying degree, many of the investments that have long gestation periods and are not productive until complete—hydroelectric plants, railway links and other infrastructure projects often fall into this category—have involved timing problems and awkward choices between leads and lags, both tending in their different ways to lower the efficiency of capital.

Bottle-necks arising from lagging sectors are not equally amenable to the sort of action that Governments are in a position to take, so that plan priorities tend to involve more than decisions about the order and intensity of the measures to effect the desired change. The economy as a whole cannot be made to wait on accomplishments in a recalcitrant sector which may depend on structural alterations requiring considerable time. While a major effort is mounted to bring about the necessary adjustments—which in the longer run cannot be avoided—arrangements must be made to bypass the problem or at least to minimize its negative effects on the course of development. To some extent, this can be done by appropriate modifications in the use of available domestic resources, substituting the more plentiful for the scarcer raw material, using labour instead of mechanical equipment, choosing technologies that are best related to existing factor endowment. But many countries have found it more convenient to make good the results of the lag by drawing resources from the rest of the world: the hiring of special skills, the encouragement of foreign investment, the importation of basic food-stuffs have all been resorted to for bridging gaps left by lagging domestic sectors. The feasibility of this depends in large measure on the status and performance of the export sector: where this is itself a bottle-neck, the economy is deprived of one of the most flexible of its development instrumentalities.

The formulation and carrying out of development policies designed to maintain the degree of balance most conducive to growth impose a very heavy strain on government machinery. Plan administration cuts across the traditional departmental struc-

<sup>3</sup> Television sets and apparatus feature among the imports of some of the lowest-income countries; and among the goods imported in the mid-1960's were many—ranging from synthetic fibres to electronic components—that were not even known ten years earlier.

ture of the civil service, and to keep normal public services functioning smoothly while changing the focus of operations from the department to the economy as a whole requires a major adjustment in attitude and organization. Even in those countries that have taken development planning most seriously and have set up planning commissions—often highly placed and attached to the prime minister's office or its equivalent—there have been many difficulties. To some extent these difficulties have been in priority determination and the choice of policy instruments, but more frequently they have arisen in the implementation of plan decisions, dependent as this has tended to be on ordinary departmental staff preoccupied with routine responsibilities. The implied emphasis on change and expansion is in some ways the antithesis of bureaucratic attitudes and procedures. It cannot be taken for granted that a department of agriculture is appropriately staffed to carry out the research, experimentation and extension work that agrarian restructuring may require. Nor can an education department, struggling to provide teachers and classrooms to meet the conventional claims of a rapidly growing child population, be expected to gear itself automatically to make the locational and curriculum changes that may be urgently necessary to meet the newly emerging needs for skilled workers and technicians. There may be no department of transport or of energy, while the department of public works may soon be swamped by the number and variety of projects stemming from the Government's own investment decisions. Control over the relevant activities of provincial and local authorities may be too weak to permit the necessary degree of co-ordination. Even the horizontal links between central government departments—traditionally through the treasury—may be unsuited to the planning function on an economy-wide basis.

Whatever the difficulties developing countries encounter in organizing the government apparatus to play the role required of it in executing an articulated development plan, the problem of integrating the private sector into the plan so that investment and production decisions are consistent with the stated objectives for the economy as a whole has generally been an even greater challenge. The problem lies partly in the size and range of the private sector (compared with the economic component of the public sector), partly in the fact that the indirect means through which government influence is brought to bear on private decision making tend to be much more effective in preventing and deterring than in encouraging and stimulating, partly in the fact that because the instruments in question are those which the Government has to rely on to manage the economy and maintain its short-term stability it is very hard to ensure complete con-

sistency in their deployment, and partly in the fact that the economy is subject to continuous and changing pressures transmitted from the outside world through export markets, the cost of imports and the flow of capital.

The extent to which developing countries tend to be exposed to impulses from abroad is implicit in the share of exports in total production. In 1963-1965 the ratio of exports of goods and services to gross domestic product exceeded 23 per cent in more than half of the developing countries, and the relative importance of the exports was increasing: in more than two-thirds of the countries the ratio had increased in the preceding eight years.

The risks of inconsistency among policy measures depend to a considerable extent on the range of instruments at the disposal of the Government. Where, for example—as is the case in many developing countries—government revenue is derived from a small number of taxes, chosen largely on the basis of their administrative feasibility, it is likely to prove too costly to use the tax system flexibly for other purposes. The provision of tax incentives—to encourage industrial investment, for example—may involve a serious loss of revenue, at least in the short run. The raising of customs duties to provide protection for a domestic activity may mean the sacrifice of needed government income. Even more awkward is the problem of taxing exports: the needs of the Government for revenue and of the economy for foreign exchange tend to be in direct conflict, and tax incentives to promote exports may involve heavy budgetary sacrifices. Price policies may be similarly torn between incompatible objectives: in many instances the desire to hold down the cost of living for urban consumers has stood in the way of pricing schedules calculated to stimulate the production of the goods or services in question.

The task of ensuring the consistent deployment of all policy instruments is often complicated by a certain duality in objectives. Even when priorities are carefully determined in the context of a five-year development plan, they may prove difficult to sustain in the face of shorter-term claims, particularly when these arise in critical areas. A harvest failure or a major decline in the world market price of a leading export product may so affect the country's economic balance that measures are required that may not be in line with plan objectives. Few developing countries have the necessary reserves to permit adjustment to strong and unfavourable shorter-term impulses without significant disruption to longer-term policies.

#### THE TRADE POLICIES OF PARTNER COUNTRIES

The most potent of the impulses emanating from abroad have been the side effects of events and

policies in the more advanced countries rather than the result of deliberate actions and measures designed to influence the course of development in the developing countries. This is not to underrate the significance of the evolution of the concept and practice of what has come to be known as "foreign aid". It is merely to recognize the paramountcy of trade in its various aspects among the external forces shaping the course of economic events in the developing countries.

The key aspect of trade in this context has been the response of imports to the rise in incomes and production in the more advanced countries. By historical standards, import demand in the advanced countries has provided a more or less continuous and vigorous stimulus to the developing countries in the post-war period. It was at its weakest in the second half of the 1950's when the North American economy was lagging and developing country export earnings grew by only 2 per cent a year. It recovered notably in the quinquennium beginning in 1961, and the growth of developing country export earnings jumped to over 6 per cent a year. With the widespread slackening in demand in Europe and North America in 1967, developing country exports growth has again flagged.

When viewed not in the aggregate but in terms of its components, the growth in the demand for imports from the developing countries has been far from uniformly dynamic, however, and for individual developing countries it is these differences that are significant not only in explaining past performance but also in pointing to future problems. Four main factors lie behind the differences in the rates of expansion in the various trade flows. The first of these—namely, production lags in the developing countries themselves—belongs to the category of development problems discussed earlier in this study.<sup>4</sup> The others have their origin in the partner countries and hence lie largely if not entirely outside the sphere of influence of the developing countries. Two of these indeed—namely, the preference patterns of consumers and the technological innovations adopted by producers—are subject only to indirect government influence in the developed market economies in which they operate. It is only the fourth of these major determinants of developing country exports—namely, official production and trade policies—that is amenable to deliberate action and change.

The most predictable and hence the factor most readily taken into account in the economic planning of the developing countries is the pattern of income growth in the more advanced countries with which they trade. At the relatively high level of personal income common in these countries, the proportion of any increment spent on conventional food-stuffs

and personal and household effects tends to be rather low. This means that the demand for many of the traditional exports of the developing countries is slow-growing and relatively unresponsive to increases in income in the more affluent partner countries.

The slow growth of demand for some products has also created problems for producers in the more advanced countries themselves. The result has often been government intervention in the market and the support of the depressed industry by means of subventions or protective tariffs or quotas. Thus in a number of cases—most notably in the agricultural and textile sectors—the problem facing exporters in the developing countries has been aggravated by the defensive policy measures adopted in their customary markets. In some cases, such measures have not only cut off access to the domestic market but also provided subsidized competition in third markets.

The opportunities for earning foreign exchange from traditional exports have also been constricted by various technological developments economizing in the use of raw materials for specific purposes, substituting new materials—sometimes synthesized for the purpose—or even eliminating the use of older materials, as in the case of bulk-handling techniques which dispense with customary packaging. These innovations have posed serious problems of adaptation for the developing countries: as not only are they economically rational (in a way that protection and other defence measures often are not) but they also tend to be irreversible: capital facilities are established and need to be fully utilized, and consumer industries adapt themselves to the new material or the new process. Nor is the change limited to the more advanced countries. The output of the new facilities may be exported to third markets and plants may be established in developing countries. Thus, Brazil, home of the *hevea brasiliensis*, now produces more synthetic rubber than natural rubber. In India, the world's third largest producer and consumer of cotton goods, the output of man-made fibres increased fivefold between mid-1950 and mid-1960 and now amounts to over an eighth of the output of raw cotton. Changes of this nature, which represent progress in some developing countries, accentuate the difficulties of other developing countries trying to enlarge their earnings from traditional exports.

Not all the technological developments of recent years have been inimical to the rapid growth of developing country exports, however. The demand for some commodities—particularly minerals such as iron, uranium and lithium ores, bauxite and, most spectacular in terms of the values involved, petroleum—has been greatly enhanced by the innovations of the post-war period, to the benefit of the develop-

<sup>4</sup> And again in chapter II.

ing countries possessing exploitable deposits. In the case of the majority of developing countries, however, and in virtually all of those in which traditional exports have been agricultural in origin, the technical innovations have tended to reduce demand. Where a developing country has managed to achieve a high rate of growth in its exports of such products, it has generally been by dint of capturing a larger share of the market—through the default of other exporters or through a deliberate effort to lower costs and raise productivity by genetic improvement or the adoption of better methods of cultivation. Post-war experience indicates that the expansion of primary production of this nature—perhaps even its survival—depends on its capacity to respond to scientific methods for improving and standardizing the product and the way in which it is produced.

Technological advance has not only altered the composition of imports into the higher-income countries, it has also affected their exports to developing countries and in a manner that has greatly complicated the latter's attempt to make optimal use of foreign exchange resources. Even with a relatively static technology, the task of speeding up the process of economic development would have imposed severe strains on the administrative machinery—particularly in the public sector—in most developing countries. In the event, the accelerating pace of technical change has made investment choices that much more difficult and, given the scarcity of capital—relative to the supply of labour—in the developing countries, it is far from certain that the wisest decisions have always been taken.

Nor have the export-selling practices of the more advanced countries always helped in the rational choice of techniques and equipment by developing countries. Once the post-war recovery stage was completed, competition intensified in export markets, including the developing countries, many of which were vulnerable not only because of their inexperience in evaluating new and often more sophisticated products and production methods but also because of their dependence on credit to finance their imports. The evidence suggests that where selling pressures were strong, there was some impairment of the ability of buyers—especially in the newly independent countries—to appraise the combined price, quality and financing terms in the critical manner so essential if foreign exchange budgeting is to serve development planning purposes. Instances of faulty investment decisions and the questionable use of short-term and medium-term credits are best known in the case of countries in which subsequent balance of payments crises and debt rescheduling have dramatized the situation, but there is no reason to suppose that the problem has not been a general one.

Thus, while it is true that the developing countries may expect to be spared many of the horrors and

wastes that characterized the industrial revolution in some of the developed market economies, more recent history suggests that the external economic environment in which industrialization is now being essayed has its own hazards. There can be little doubt that neither the production techniques nor the consumption patterns of the more advanced countries are well suited to the factor endowment and income levels of most developing countries. Maximization of the benefits to be derived from trade and other forms of exchange with the more advanced countries entails purposeful selection and adaptation in the light of domestic resources and needs.

#### AID POLICIES AND PRACTICES

Not all the transactions of the developing countries with the more advanced countries have involved trade. Over most of the post-war period, indeed, the developing countries have run a trade and current account deficit with the rest of the world. This has been filled by a flow of resources through direct investment, private lending, government lending and government transfers of a unilateral nature.<sup>5</sup> In varying degree, each of the flows has contributed to the development process, but each has had its particular weaknesses and, in the aggregate, the result has been disappointing not only in relation to the needs of the developing countries but also in relation to the targets adopted for such transfers by the international community.

The inadequacy of the traditional forms of resource transfer—private direct and portfolio investment—reflects the change in the nature and dimensions of the task to be performed, as compared with the slow development of the territories opened up by immigrant settlers in the nineteenth century. The contribution of private direct investment in the post-war period has been confined very largely to the exploitation of mineral deposits with a ready export market and to manufacturing enterprises concentrated by and large in areas of relatively high demand or familiar to the investors as a result of earlier trading relations. Private lending has also been limited very largely to the most developed among the low-income countries, except in those cases—most notably in connexion with trade credits—in which donor Governments have organized an acceptable system of insurance or guarantee.

The factors inhibiting the movement of private capital to the developing countries have varied from

<sup>5</sup> The filling of the deficit in this sense is purely a statistical one. Operationally, the deficit may, in many instances, have been the consequence of resource transfers of one kind or another—a direct investment, for example, or a donation of food.

one situation to another,<sup>6</sup> but underlying most of them have been the competitive opportunities for profitable investment in the developed market economies, the capital intensity of much of the post-war development in the more advanced countries, the ambivalence in the official attitude towards foreign investment exhibited in many developing countries and doubts of potential investors regarding the viability and debt-servicing capacity of some of those countries. None of these obstacles to the flow of private capital is permanent or immutable, and experience has shown that some of the environmental difficulties that deter private investors may be reduced or circumvented by institutional devices such as official investment guarantees and licensing and management contracts that put machines, processes and expertise into operation in a country with minimum interference with what it may regard as its economic sovereignty.

As it became clearer that the movement of private capital was not going to be sufficient to provide external resources either to the countries and sectors most in need of them or on the scale necessary to achieve the desired acceleration in growth rates, emphasis on official resource transfers rapidly increased. Early post-war efforts in the framework of colonial welfare and development budgets, refugee resettlement, war damage restitution and technical assistance under the Colombo Plan and the United States Point Four legislation were greatly augmented from a number of quite differently motivated sources. Quantitatively most important were the flows evoked by security considerations, useful for gaining domestic political acceptance for "foreign aid" and intended to win the allegiance of recipient countries or at least neutralize them in the ideological conflict that characterized much of the 1950's. Of increasing importance after 1954 were the transfers of food-stuffs accumulating as the result of farm support measures in some of the developed market economies, most notably the United States. Also of increasing importance as the 1950's progressed were the efforts to provide the means to finance exports in the light of intensifying competition: these resulted not only in the spread of official insurance mechanisms referred to above, but the lengthening of credit periods. And perhaps of greatest long-term significance, the completion of its reconstruction function released the resources of the International Bank for Reconstruction and Development (IBRD) for use in the developing countries. This

was followed, in 1961—when the prospective capacity of some developing countries to service ordinary loans was becoming more and more questionable—by the establishment of the International Development Association (IDA) with the authority to lend at low interest rates and for long periods.

The 1950's thus saw the evolution of a foreign aid doctrine born of a recognition of the need for large-scale and continuous transfers of resources from the richer countries to the poorer. As indicated at the beginning of this review, the culmination of the process was the setting of a target for such transfers, relating them explicitly to the income generated in the more advanced countries—initially, in 1960, as a group, later, in 1964, as individual donors—thereby adding another consideration, burden sharing, to those that had motivated and guided the flow of aid during the 1950's, namely, humanitarianism, the fostering of mutual security, export promotion and surplus disposal.

The most significant characteristic of these desiderata in the present context is the fact that they are all donor-centred. That resource transfers should thus be determined by criteria relating to the country of origin reflects in part the need to persuade donor-country legislatures to vote the necessary funds and in part the absence of an adequate mechanism to bring recipient-country criteria effectively to bear on the nature and direction of the resource flows. There was no organized means either of determining need priorities among developing countries or of co-ordinating and marshalling the many potential sources of aid available to any one developing country. Even among the multilateral sources of aid, each agency had to a large extent become individually responsible for determining the distribution of the resources at its disposal.

The first break in this system came with the balance of payments crisis of India in 1958 which led to the setting up of an aid consortium within which resource flows could be determined and committed not solely on the basis of what individual donors could muster but also on the basis of an appraisal of the intentions and prospects of the recipient. Several other consortia were set up in the years that followed, each making a particular developing country the focus of its concern. Looser, though from the present point of view essentially similar, mechanisms were also created in the form of consultative groups for each of a number of developing countries, while in 1963, the Inter-American Committee for the Alliance for Progress was set up to complement the work being done by the so-called Committee of Nine in evaluating the plans and needs of individual Latin American countries. And within the United Nations, the first step has recently been taken to create machinery—the United

<sup>6</sup> For a discussion of some of the problems, see *World Economic Survey, 1965, Part I: Financing of Economic Development* (United Nations publication, Sales No.: 66.II.C1), especially chapter II. Other United Nations studies of the problem include the series of reports on "The International Flow of Private Capital" issued between 1953 and 1960 and the subsequent series on "The Promotion of the International Flow of Private Capital" of which the most recent is document E/4038 and Add 1.

Nations Development Programme (UNDP)—that would permit the Special Fund and the various agencies co-operating in the Expanded Programme of Technical Assistance (EPTA) to act in concert in respect of the requests of individual countries.

That this institution building has not yet had any widespread impact on the problem of raising the efficiency of allocation and utilization of external resources is not attributable to any lack of need for it or any proved inadequacy. Rather does it reflect the fortuitous concurrence of other events and tendencies. Foremost among these has been the deterioration in the balance of payments position of the United Kingdom and the United States, two of the principal donor countries. This has not only played a major role in preventing the total volume of resources transferred from rising as rapidly as income in the donor countries in recent years,<sup>7</sup> it has also greatly accentuated the tendency for the more advanced countries to select their aid baskets according to their own convenience rather than in accordance with the needs and priorities of the recipient country. It has also tended to make more awkward what for donor participants has always been the least welcome aspect of the consortium, namely, the direct interdonor comparisons that are implicitly invited when aid commitments are made publicly within a common framework. Defensive behaviour soon spreads and the problem of burden sharing assumes undue importance.

These new mechanisms have also found recipient countries in a more defensive posture, born in some instances of an increased awareness of lack of success in planning or, more often, in the implementation of plans. There is an understandable reluctance to appear as a suppliant before a panel of potential critics of the way in which resources are to be generated and allocated. There is a temptation to draw up plans that will pass the mechanical tests of the panel even when it is known that they will not, or even cannot, be carried out. It is more difficult to persuade such a panel of the validity of all the subtle, historically rooted cultural and political criteria that may in fact have to be applied in the determination of objectives and priorities in a realistic plan that is within the capacity of the Government to implement.

<sup>7</sup> An analysis of the factors affecting the ability of the more developed countries to transfer resources to the less developed is contained in *The External Financing of Economic Development* (United Nations publication, Sales No.: E 68 II D 10).

To avoid the difficulties that may be inherent in the confrontation of donor and recipient, it may be possible to organize an independent intermediary service combining the two essential functions necessary to maximize the effectiveness of external resources as an adjunct to the resources mobilized domestically, namely, evaluation in respect of the plan and advice in respect of the nature and source of external assistance. The successful operation of such a mechanism would strengthen the planning units in the developing countries: it would reduce the amount of direct project arrangement initiated by bilateral aid missions and by international agencies with the individual ministries concerned, and thereby help the planning authorities to exercise their proper influence over priorities. It would serve in a generalized way for any developing country in the functions that are now being performed for the few countries for which aid consortia or consultative groups have been created.

In the present context, it is the function that is important rather than the machinery: the latter will continue to evolve under the formative pressures of experience. And experience points conclusively to the need to tackle development problems at the level of the individual developing country.

The foregoing review has sought to bring together the principal features of the development process as these have appeared in the past ten years, generalizing on the basis of the lessons that experience seems to teach. Whatever else can be learned from such distillation, the most important conclusion would appear to relate to the limitations of generalizations as a basis for action. While the same problem recurs over and over again, its setting is always unique, so that the way to deal with it cannot be predetermined; it has to be worked out in the circumstances of the country concerned and in the light of the priorities of the time. In the final analysis, a development strategy must be country-based and continuously modified in the light of events. Many of these events occur in export markets and affect the availability of external resources, but the focus must be kept on the needs of the country in question and the domestic resources at its disposal. It is up to the rest of the world, in line with the pledge implicit in the United Nations Charter, to assist in making the external environment as favourable as possible for this development process.

## Chapter I

### THE DIMENSIONS OF RECENT ECONOMIC GROWTH

Between 1955 and 1965 the developing countries recorded an average rate of growth in the total output of goods and services of 4.5 per cent a year. Behind this average lies an extraordinarily wide range in economic performance on the part of individual countries. Many made impressive gains in industrial production and in the expansion of the manufacturing sector. Many achieved a rapid increase in export earnings. A number registered significant gains in savings and investment rates. Some raised their agricultural output rapidly enough to sustain a notable rate of increase in both exports and domestic consumption. At the other end of the scale, however, were countries in which some or all of these indicators of development lagged far behind the average while, in a few cases, they even fell below the growth in population.

Though a quantitative appraisal of economic performance has inevitably to rely heavily on such production measurements, their limitations should be recognized. The more effectively allowance can be made for structural and institutional achievements which may not be fully reflected in short-run changes in output, the more realistic is the assessment of past experience likely to be. Among such achievements are those relating to the availability of knowledge, the state of the economic infrastructure, the distribution of wealth and of incomes, the efficiency of administration, the equity and productivity of the tax systems, the capacity to use economic policy instruments in a coherent and purposeful manner, the appropriateness of the land tenure system for the introduction of productivity-raising innovations in cultivation techniques and the effectiveness of financial institutions to mobilize and canalize the economy's savings. They are not easily quantifiable yet are often of great significance for economic welfare and growth. Changes in the structure and organization of the economy affect the output of goods and services only in the long run. Eventually their results enter into the national accounting measure of growth, even though in a short period, such as the one reviewed in this chapter, the correlation between foundation building and end-product output may not be very close.

In any assessment of performance, moreover, the incidence of exogenous forces must also be allowed for. The discovery of a new natural resource, a

decline in world demand for a major export commodity, a series of droughts or floods may, each in its own way, exert a considerable impact on the short-term course of events and hence on levels of production and rates of growth. In small and simple economies, disturbances of this nature may effect changes in short-run trends. In examining a ten-year slice of economic development, both terminal conditions and the incidence of fortuitous events must be taken into account.

In assessing performance, it is necessary to make due allowance not only for the unquantifiable achievements of the developing countries but also for those that are unquantified merely because of the inadequacy of the statistical apparatus of particular countries. This latter problem is complicated by the enormous disparity between countries at the opposite ends of the size scale, as a result of which averages tend to be dominated by the larger economies. Merely leaving India out of the developing country reckoning, for example, changes the average course of growth between the second half of the 1950's and the first half of the 1960's from one of deceleration to one of acceleration. By the same token, the over-all growth of the developing countries was measurably affected by the poor Indian harvest of 1966/67 and by the sharp recovery in 1967/68.

If the great diversity behind recent economic history is to be appreciated, therefore, aggregates and averages must be used circumspectly and interpreted cautiously in the knowledge of the differences they subsume.

#### TRENDS IN TOTAL PRODUCTION

Over the period 1955-1965, the developing countries registered an over-all gross domestic product growth rate appreciably higher than that of the developed market economies. This is true of each of the major regions taken separately, with the exception of southern and south-eastern Asia where the average rate of growth at 3.9 per cent *per annum* was fractionally below the 4.0 per cent recorded by the developed market economies.

The relative gain by the developing countries was made in the 1950's when their combined growth

rate was almost half again as high as that of the developed market economies. In the 1960's, there was a sharp rise in the rate of increase in the gross domestic product of the more advanced countries, but a slackening in Latin America and southern and south-eastern Asia which brought the developing country average down below that of the developed market economies and also below the developing country rate in the 1950's.

While the developed market economies were stepping up their rate of increase in the production of goods and services, their rate of growth in population declined—from about 1.2 per cent a year in the 1950's to about 0.9 per cent in the first half of

the 1960's. In the developing countries, by contrast, population growth rates were moving in the opposite direction: as a result of a steep decline in death rates and a continuation of high birth rates, the average growth rate rose from about 2.2 per cent *per annum* to about 2.5 per cent. In the period 1960-1965, the average increase in the population of the developing countries was about 37 million a year—one-third higher than in the 1950's. This compares with expansion in the centrally planned economies of about 13 million a year and in the developed market economies of about 6 million a year—both more or less in line with the absolute averages of the 1950's (see table 1).

Table 1. Average annual increase in population: world and major regions, 1930-1965  
(Millions)

Period	World	Devel- oped market econo- mies <sup>a</sup>	Cen- trally planned econo- mies <sup>b</sup>	Developing countries <sup>c</sup>			
				Total	Latin America	Africa	Asia
1930-1950	22	4	3	15	3	3	9
1950-1960	48	7	13	28	5	5	18
1960-1965	56	6	13	37	6	7	24

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on *World Population Prospects*, Population Studies No. 41 (United Nations publication, Sales No.: 66.XIII.2).

<sup>a</sup> North America, western Europe, Japan,

Australia and New Zealand.

<sup>b</sup> Mainland China, USSR and other eastern Europe.

<sup>c</sup> Latin America, Africa, Asia (excluding mainland China and Japan), Oceania (excluding Australia and New Zealand)

When these population changes are taken into account, the relative position of the developing countries is seen to be substantially less favourable. In the second half of the 1950's, their combined rate of increase in *per capita* production was slightly higher than that of the developed market economies, but in the first half of the 1960's it dropped to little more than half of that of the developed market economies.

Over the whole period 1955-1965, the over-all average rate of *per capita* growth was 2.1 per cent a year in the developing countries, compared with 2.8 per cent in the developed market economies (see table 2).

The contrast is dramatized by translating it into absolute terms. Over the ten years, *per capita* output grew by \$43 a year (1960 purchasing power) in the developed market economies, compared with a mere \$3 a year in the developing countries. By 1965, this had brought the average up to \$1,725 *per annum* (1960 purchasing power) in the developed market economies, about eleven times the developing country average of \$157 (see table 3).

As indicated above, within the developing group there were widely differing performances—from

virtual stagnation to rates of growth of over 10 per cent a year. The differences were not noticeably associated with geography: countries from each of the three main regions—Asia, Africa and Latin America—are to be found in the high-growth group (registering an increase of over 6 per cent *per annum* in real gross domestic product) and the low-growth group (growing at less than 3 per cent a year). Nor was it a matter of size: at both ends of the growth scale there were countries with populations of under 1 million and others with populations of over 10 million (see table 4).

The resource base seems to have been a more important factor—and its industrial and export implications are examined in the next section—but mineral-exporting countries feature not only in the fastest-growing group but also in the slowest. Income levels appear to have played a significant part: the average *per capita* output was highest in the high-growth group and it dropped sharply, from a 1965 figure of almost \$500 (1960 purchasing power) to less than \$300 for the group with a 5.0-5.9 per cent growth rate, less than \$200 for the 4.0-4.7 per cent group and about \$100 for the group with average growth rates between 3.0 and 3.9 per cent. However, even a relatively high *per capita* output is no

Table 2. Developed and developing countries: growth of real gross domestic product, 1955-1965

(Annual percentage rate)

Country group	1955-1960		1960-1965		1955-1965	
	Total	Per capita	Total	Per capita	Total	Per capita
Developed countries <sup>a</sup>	3.2	2.0	4.9	3.6	4.0	2.8
Developing countries <sup>b</sup>	4.6	2.3	4.4	1.9	4.5	2.1
Latin America	4.6	1.9	4.4	1.7	4.5	1.8
Africa	4.3	2.1	4.5	2.3	4.4	2.2
West Asia	6.5	4.0	7.3	4.6	6.9	4.3
Southern and south-eastern Asia	4.2	2.0	3.5	1.2	3.9	1.6

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on data from the Statistical Office of the United Nations and national sources.

Note: Except where indicated, growth rates cited in this chapter represent the average of year-to-year changes over the specified period, always taking the higher of each pair of figures as denominator.

<sup>a</sup> Australia, Austria, Belgium, Canada, Cyprus, Denmark, Federal Republic of Germany, Finland, France, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Malta, Netherlands, New Zealand, Norway, Portugal, Puerto Rico, South Africa, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States, West Berlin.

<sup>b</sup> Latin America: Argentina, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Netherlands Antilles, Nicaragua,

Panama, Paraguay, Peru, Surinam, Trinidad and Tobago, Uruguay, Venezuela; Africa: Algeria, Angola, Cameroon, Cape Verde Islands, Central African Republic, Chad, Congo (Brazzaville), Democratic Republic of the Congo, Dahomey, Ethiopia, French Somaliland, Gabon, Gambia, Ghana, Guinea, Ivory Coast, Kenya, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Niger, Nigeria, Portuguese Guinea, Réunion, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, Southern Rhodesia, Sudan, Togo, Tunisia, Uganda, United Arab Republic, United Republic of Tanzania, Upper Volta, Zambia; West Asia: Aden, Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Qatar, Saudi Arabia, Syria; Southern and south-eastern Asia: Afghanistan, Brunei, Burma, Cambodia, Ceylon, China (Taiwan), Hong Kong, India, Indonesia, Laos, Pakistan, Philippines, Republic of Korea, Republic of Viet-Nam, Sabah, Sarawak, Singapore, Thailand, West Malaysia.

Table 3. Developed and developing countries: real gross domestic product per capita, 1955-1965

(Dollars at 1960 prices)

Country group	1965	Average annual increase	
		1960-1965	1955-1965
Developed countries <sup>a</sup>	1,725	59	43
Developing countries <sup>b</sup>	157	3	3
Latin America	376	6	6
Africa	120	3	2
West Asia	381	16	13
Southern and south-eastern Asia	96	1	1

Source and foot-notes: See table 2

guarantee of a satisfactory rate of expansion: Argentina and Uruguay, whose *per capita* outputs were respectively 4 and 3 times the developing country average, were among the countries at the low end of the growth spectrum. Contrariwise, a low level of *per capita* income is no barrier to relatively rapid expansion: Thailand achieved a growth rate of nearly 6 per cent *per annum*, for example, even though its *per capita* gross domestic product was well below the developing country average, while China (Taiwan) registered an even higher growth

rate with a *per capita* income only moderately above the developing country average.

While this notable disparity in performance raises many questions, it must also be recognized that the great mass of the population of the developing world lives in countries whose rates of growth between mid-1950 and mid-1960 were below the median figure of 4.4 per cent. Indeed, over 1,000 million people live in the countries with average rates of growth between 3 and 5 per cent. Less than a fourth of that number live in countries which exceeded the Development Decade target of 5 per cent. Or, to look at the record in another way, two-thirds of the population of the developing countries live in countries in which the rise in *per capita* output between 1955 and 1965 was less than 2 per cent a year, while less than 10 per cent live in countries with a *per capita* growth rate in excess of 3 per cent a year (see table 5).

#### THE PATTERN OF RECENT ECONOMIC GROWTH

The spectrum of gross domestic product growth rates over the 1955-1965 span is extremely wide. At the one end are rates that are so high that they can hardly be sustained over a lengthy period. At



Table 5. Distribution of developing countries<sup>a</sup> by rate of growth of *per capita* real gross domestic product, 1955-1965

Annual average growth of <i>per capita</i> gross domestic product (percentage)	Countries		Gross domestic product (Percentage, 1965)	Population
	Number	Percentage		
4.0 and over	10	16	7	3
3.0 to 3.9	8	13	7	6
2.0 to 2.9	12	19	30	25
1.0 to 1.9	17	27	48	57
Under 1.0	16	25	9	9
Total	63	100	100	100

Source: See table 2.

<sup>a</sup> Countries in each category are as follows (in descending order of annual average growth of *per capita* gross domestic product, 1955-1965): 4.0 per cent and over: Libya, Liberia, Jordan, Saudi Arabia, Israel, China (Taiwan), Sierra Leone, Angola, Jamaica, Trinidad and Tobago; 3.0 to 3.9 per cent: Mozambique, Barbados, Tunisia, Panama, former French Equatorial Africa, Syria, Thailand, Iran; 2.0 to 2.9 per cent: Republic of Korea, Iraq, Guatemala,

Mexico, Nigeria, United Arab Republic, Peru, Venezuela, former Federation of Rhodesia and Nyasaland, Algeria, Nicaragua, Pakistan; 1.0 to 1.9 per cent: El Salvador, Brazil, Cameroon, Ethiopia, Chile, Ghana, Lebanon, former French West Africa, United Republic of Tanzania, Argentina, Philippines, Honduras, India, Togo, Uganda, Ecuador, Sudan; under 1.0 per cent: Burma, Dominican Republic, Bolivia, Colombia, Kenya, Paraguay, Costa Rica, Ceylon, Morocco, Mauritius, Kuwait, Guyana, Haiti, Uruguay, Madagascar, Democratic Republic of the Congo.

the other are rates that are likely to be regarded as too low to be tolerated for long.

Within the compass of the present review, no attempt can be made to explain these rates: for this purpose the course of economic development would have to be studied case by case and year by year. Nor is it possible to derive a typology from the recorded results that would permit countries to be classified in ways which might help to reveal the causative process behind the specific growth achievements. Given the heterogeneity of country circumstances and the large number of influences impinging on each case, all that can be sought at this initial stage are patterns of change and hints about the factors responsible for them.

#### *Growth of the major sectors*

The countries listed in table 4 may be rather arbitrarily divided into three more or less equal groups according to whether their 1955-1965 gross domestic product growth rate was rapid (twenty-one countries with production rising at over 5 per cent a year), medium-paced (twenty countries with production rising at 4-4.9 per cent a year) or slow (twenty-two countries with production rising at less than 4 per cent a year). In each group, there were countries in which a fairly stable rate of advance had been maintained—nine in the high-growth group, six in the medium group and seven in the slow group. In each group, there were also countries in which the rate of increase in output accelerated perceptibly between 1955-1960 and 1960-1965—eight in the high-growth group, six in the medium group and nine in the slow group. Similarly, there were in each group countries in which the pace of advance was significantly lower in the second quinquennium than in the first—five in the high-growth group, seven in the medium group and six in the slow group. Though there

were proportionately fewer decelerating countries in the high-growth group and proportionately more accelerating countries in the low-growth group, the distribution was characterized more by its uniformity than by its skewness (see table 6).

One of the most striking features of the distribution is the concentration of mineral-based economies in the high-growth group. Of the fifteen countries in which, outside the traditional subsistence sector, the predominant single activity is mining, no less than eleven are to be found in the high-growth group. Most of them—Iraq, Kuwait, Libya, Saudi Arabia, Trinidad and Tobago and Venezuela—are major petroleum producers and exporters, but in Jordan the expansion was in the production of phosphates (exports of which increased at about 15 per cent a year in value), in Liberia, iron ore and concentrates (exports of which rose at over 30 per cent a year), in Jamaica, bauxite and alumina (production and export of which expanded very rapidly, from a small base, in the 1950's), and in Sierra Leone, iron ore and diamonds (exports of which also rose rapidly in the 1950's and then began to move rather erratically).

The mineral-based economies in the medium-growth group are Chile and the former Federation of Rhodesia and Nyasaland. Chile maintained a fairly steady rate of increase in total production: its mining output and exports grew more rapidly in the first half of the 1960's than in the second half of the 1950's but the gain was largely offset by the slow growth of agriculture which added to the import burden and accentuated the difficulty of maintaining price stability. In the former Federation of Rhodesia and Nyasaland, the main mining expansion was in the 1950's; in the 1960's, the rate of increase in production and exports declined appreciably.

Table 6. Developing countries: growth of major gross domestic product components, 1955-1960 and 1960-1965

Country <sup>a</sup>	Gross domestic product		Agriculture		Industry		Exports	
	1955-1960 <sup>b</sup>	1960-1965	1955-1960 <sup>b</sup>	1960-1965 <sup>c</sup>	1955-1960 <sup>b</sup>	1960-1965 <sup>c</sup>	1955-1960 <sup>b</sup>	1960-1965
Libya	14.3	25.0	6 <sup>d</sup>	5 <sup>d</sup>			-	44
Jordan	11.3	11.7	-4 <sup>e</sup>	13 <sup>e</sup>			8	12
Liberia	10.1	12.0	2 <sup>a</sup>	2 <sup>e</sup>			8	17
Israel	8.0	9.0	8	4	8	10	17	11
Kuwait	11.1	4.9					9	6
China (Taiwan)	6.2	9.2	4	6	7	11	18	17
Saudi Arabia	4.3	10.9					6	9
Trinidad and Tobago	9.7	4.1					11	9
Panama	4.8	7.4	3	6	6	11	2	8
Syria	2.6	8.2	1	12	5	7	4	1
Jamaica	6.7	5.0					12	6
Thailand	5.9	5.7	5	4	2	9	3	9
Mexico	5.7	5.7	3	4	8	7	4	5
Iraq	5.8	5.5	3 <sup>d</sup>	4 <sup>d</sup>	12	5	5	6
Angola	5.3	5.9					7	6
Venezuela	5.9	5.3	6	6	7	8	6	7
Sierra Leone	7.3	3.8		2 <sup>e</sup>			13	1
Iran	5.6	5.5	4 <sup>d</sup>	3 <sup>d</sup>		8	17	8
Guatemala	5.0	6.1	5	5	6	9	9	9
Republic of Korea	4.6	6.6	2	5	10	12	12	19
Barbados	4.8	3.4					4	8
Peru	4.2	5.9	5	4	6	7	9	4
Nicaragua	2.2	7.7	-	7	5	9	2	14
Mozambique	4.5	5.4					3	5
Former Federation of Rhodesia and Nyasaland	6.3	3.5	3	4	7	6	8	4
El Salvador	3.8	6.0	2	5	-4	-4	3	11
United Arab Republic	4.5	5.2	4 <sup>d</sup>	3 <sup>d</sup>	14 <sup>f,g</sup>	16 <sup>f</sup>	7	5
Former French Equatorial Africa	5.4	4.3					5	13
Tunisia	4.1	5.2	8 <sup>d</sup>	-2 <sup>d</sup>		6	3	-
Brazil	5.3	4.0	5	4	5	4	1	1
Costa Rica	6.1	3.0	3	3	8	5	7	5
Philippines	4.5	4.4	-	3	8	6	7	7
Nigeria	2.5	6.3	2	4	14	10	4	9
Honduras	4.5	4.2	5	3	6	7	5	9
Dominican Republic	5.0	3.6	4	2	8	2	5	-1
Ghana	5.8	2.6		2 <sup>e</sup>			7	8
Ecuador	4.4	4.0	5	3	5	6	3	3
Former French West Africa	3.3	4.9					9	9
Algeria	8.6	-0.6	-	-2	9	-4	1	8
Pakistan	3.3	4.8	3	3	6	9	-6	7
Chile	3.8	4.1	2	1	3	3	3	5
Colombia	3.6	4.2	3	3	6	5	3	3
Lebanon	3.2	4.5	3	5	2	4	9	14
Cameroon	3.8	3.9		3 <sup>e</sup>			9	6
Togo	3.9	3.3	6 <sup>e</sup>	1 <sup>e</sup>			-2	18
Uganda	3.1	3.9	4	3	-1	6	7	4
Kenya	3.8	3.2	4	3	5	5	12	6
India	4.2	2.6	3	2	4	5	-2	3
United Republic of Tanzania	3.3	3.4		2		10	10	4
Ethiopia	2.6	4.1	1	3	9	6	5	12
Morocco	2.5	3.8	1	3	3	4	2	-
Burma	5.2	1.0	3	2	14	5	3	-6
Paraguay	2.3	3.9	2	4	1	4	8	7
Argentina	3.0	3.2	-	2	4	5	5	4
Mauritius	-0.7	6.7	-8	10	-10	10	-8	14
Ceylon	2.8	3.0	1	3	1	7	1	3
Sudan	4.4	1.1	3	2	5	8	6	5
Guyana	3.9	1.4		1		5	6	4

Table 6. Developing countries: growth of major gross domestic product components, 1955-1960 and 1960-1965 (continued)

Country <sup>a</sup>	Gross domestic product		Agriculture		Industry		Exports	
	1955-1960 <sup>b</sup>	1960-1965	1955-1960 <sup>b</sup>	1960-1965 <sup>c</sup>	1955-1960 <sup>b</sup>	1960-1965 <sup>c</sup>	1955-1960 <sup>b</sup>	1960-1965
Bolivia	-0.3	4.8	3	3	-2	5	-4	5
Madagascar	-0.3	3.6		2 <sup>e</sup>			-1	7
Haiti	2.1	0.7	2	1	4	1	6	—
Uruguay	0.1	1.0	-3	2	1	1	1	2
Congo (Democratic Republic of)	-1.8	1.4	-1 <sup>o</sup>	-3 <sup>e</sup>			-1	-4

Source: See table 2.

<sup>a</sup> In descending order of average annual gross domestic product growth rate over the period 1955-1965.

<sup>b</sup> 1954-1959 in the case of Barbados and Sudan.

<sup>c</sup> 1960-1964 in the case of Iraq, former Federation of Rhodesia and Nyasaland, Pakistan, Lebanon, Kenya, India, Burma and Sudan.

Also in the medium-growth group are several countries in which mining played a sharply increasing role in the economy in the course of the period. In Algeria, the development of the petroleum industry served to raise the rate of increase in exports but was insufficient to offset the slackening in other sectors—particularly agriculture—during and after the struggle for independence. Mineral development also played an important part in making up for a relatively poor performance in agriculture in the Central African Republic, Congo (Brazzaville) and Gabon, whence there was a sharp increase in exports of petroleum, diamonds, manganese and uranium oxide in the 1960's. In Nigeria, on the other hand, there was some improvement in agriculture and this added to the expansionary effects of petroleum development: the share of petroleum in total exports rose from zero to about a fourth, while the over-all gross domestic product growth rate was sharply increased.

In the slow-growth group, the countries that are largely mineral oriented are Bolivia and the Democratic Republic of the Congo. The first half of the 1960's brought a sharp reversal in the downward drift of the previous quinquennium, especially in the case of Bolivia. The rising demand for tin and copper on the world markets contributed materially to the upturn in these countries.

The stimulus imparted by the mineral industry has generally been of a dual nature. In the initial stages, it consists largely of investment—in physical and geophysical exploration, in the erection of surface works, transport and power facilities and other forms of infrastructure and, finally, in actual mining. In most of the cases cited above, the financing of this mineral development has been carried out by foreign capital. When the mine is operating, the stimulus tends to come mainly through the distribution of revenue, for the purchase of local inputs and the payment of taxes. And in the case of export-

<sup>d</sup> Index of agricultural production; source: Food and Agriculture Organization of the United Nations, *The State of Food and Agriculture, 1967* (Rome).

<sup>e</sup> Agricultural production index (United States Department of Agriculture).

<sup>f</sup> Index of industrial production; source: United Nations, *Monthly Bulletin of Statistics*.

<sup>g</sup> 1956-1960.

based mines, there is the contribution of foreign exchange. When development and operations overlap, the impact on the economy can be very powerful: for short periods, total production may be induced to expand at rates that cannot be maintained once the inflow of new capital ceases, the slack in the local economy is taken up and the new facilities begin to operate at normal capacity. This sequence lies behind some of the cases of sharp deceleration in growth rates in mineral economies producing an export product, the demand for which was rising more rapidly in the 1960's than in the 1950's.

Also concentrated largely in the high-growth group were the countries with a relatively broad base in the economy as a whole or in its export sector. Among such countries are China (Taiwan), Israel, Mexico, Panama, Peru and Republic of Korea. These countries registered relatively high rates of growth in agriculture and industry and also in exports, except in the case of Mexico where the expansion was largely domestically oriented and the result was a particularly sharp change in the structure of total production: the proportion contributed by manufacturing increased from 24 per cent in 1955 to 29 per cent in 1965, while the proportion contributed by agriculture contracted correspondingly—from 22 per cent to 17 per cent. The only significant export item to emerge in this period was chemicals, whose share of total Mexican exports of manufactures rose almost threefold to over one-fifth. Altogether, however, the contribution of manufactures to total commodity exports increased from 15 per cent to 20 per cent.

In Panama, petroleum refining was an important new industry and there was a steep rise in exports of petroleum products; as a result, the share of bananas in commodity exports dropped from over 70 per cent in the mid-1950's to below 50 per cent in the mid-1960's. In the Republic of Korea, there was a dramatic expansion in the importance of industry in the economy: its contribution to gross

domestic product almost doubled (to 16 per cent) over the ten-year span while the share of manufactured goods (including, in particular, plywood and clothing and other textiles) in total commodity exports rose more than fourfold (to 54 per cent).

Exports also played a dynamic role in China (Taiwan) and Peru, facilitating major acceleration in the pace of industrial development. In Peru, there were important gains in mineral production but the main focus of expansion was the fishmeal industry whose contribution to export earnings rose from negligible proportions in the mid-1950's to nearly one-fourth in the mid-1960's. In China (Taiwan) the expansion was more broadly based, but export sales also helped, especially in the case of textiles and processed food-stuffs: the rise in the output of manufactures compensated for the slow growth in traditional exports—particularly sugar—and helped to maintain a very high rate of growth in total exports throughout the ten years under review.

A few of the more broadly based economies were in the slow-growth category. Lebanon is one such country, though its performance improved appreciably in all major sectors in the first half of the 1960's. India is a contrasting example: its over-all growth declined in the 1960's in the wake of smaller harvests. Despite this deterioration in agriculture, India managed to improve its export record: there was a further increase, both absolute and relative, in shipments of manufactures, particularly in textiles which accounted for almost three-fourths of its total exports of manufactured goods by the mid-1960's.

The remainder of the high-growth group consisted of essentially agricultural countries—Angola, Guatemala, Syria and Thailand—that achieved a more or less balanced expansion. In Angola, the main component of the export growth was *robusta* coffee, the relatively low-priced variety used very largely in the expanding production of so-called "instant" coffee. In Guatemala, the most dynamic sector was industry though a fairly vigorous export growth was based on agricultural products, particularly cotton, output of which rose sharply in the 1960's. In Syria, the economy recovered in the 1960's from a rather poor agricultural performance in the 1950's.

In Thailand, the proportion of total output contributed by agriculture declined from 39 per cent in 1955 to 35 per cent in 1965. Nevertheless, agricultural growth yielded a rapid rise in maize exports and was sufficient to sustain a rate of expansion of 5 per cent a year in rice exports and of 6 per cent in rubber exports (though in the case of the latter, declining prices cut the growth in value to less than half of this rate). Agriculture also provided the most dynamic export among manufactured products, namely, preserved vegetables, which rose by an average of 17 per cent a year, overtaking lum-

ber as the main item among exports of manufactures. As a result of this diversification, the share of the two traditional items—rice and rubber—in total commodity exports dropped sharply from about two-thirds at the beginning of the period to about a half at the end.

The remainder of the developing countries—about two-thirds of all those for which data are at present available—registered medium or low rates of over-all growth in production between 1955 and 1965. They are all essentially agricultural countries in the sense that agriculture is generally the largest single contributor to total production and provides the great bulk of commodity exports—in most instances in the form of one or two main products. Their progress has depended very largely on the degree of success in raising agricultural productivity, in adjusting to the exigencies of external markets for their leading exports and in diversifying their domestic economies, particularly through industrial development. The fact that none of these countries achieved a growth rate of 5 per cent a year and most averaged less than 4 per cent is indicative of the difficulty of the task.

Almost all the countries in the medium-growth group (4-4.9 per cent a year) managed to keep the rate of increase in agricultural output above that in population. The exceptions were Ghana and the Philippines. In Ghana, the principal lag was in the local food-producing sector, but fluctuations in the cocoa market—especially the decline in prices from 1960 to 1962 and again from 1963 to 1965—also had a negative impact on economic development. In the Philippines, the share of agriculture in total production dropped from 42 per cent in the mid-1950's to 31 per cent in the mid-1960's. As in Ghana, the lag in agriculture added to the import load, but the expansion of the hardwood industry provided compensatory exports and there was a more vigorous growth in manufacturing, part of which—notably in clothing and other textile items—was also reflected in exports.

In several countries, agriculture tended to lag during part of the period under review—in El Salvador and Nicaragua in the first quinquennium, for example, and in the Dominican Republic and Tunisia in the second. In El Salvador and Nicaragua, the recovery in agriculture in the 1960's was largely export based and was accompanied by a sharp rise in cotton earnings. In the Dominican Republic, the slackening in agriculture was accentuated by declining sugar prices on the free market and the whole economy decelerated. In Tunisia, on the other hand, there were offsetting developments in other sectors, notably in mining production and in the processing of phosphates, so that the over-all rate of growth was actually somewhat higher in the 1960's than in the second half of the 1950's.

Expansion in other sectors also helped to raise the rate of growth in Pakistan and to sustain it in Ecuador, Honduras, Mozambique and the United Arab Republic, where agricultural progress was on the whole better maintained. In Pakistan, the contribution of agriculture to total production declined from 55 per cent in the mid-1950's to about 49 per cent in the mid-1960's. There was a corresponding rise in the contribution of industry; this was reflected strongly in exports, the manufactured component of which—heavily weighted by textiles—rose more than fourfold, to over one-third of the total by the mid-1960's.

On a much smaller scale, Honduras also expanded its manufacturing sector—from 11 per cent to 14 per cent of gross domestic product—but in this case, not at the expense of agriculture, which accounted for about the same share of total output (43 per cent) at the end of the period as in the beginning. Nevertheless, the economy's dependence on bananas and coffee was reduced—from 75 per cent to less than 60 per cent of total exports—by the growth of other exports including, in particular, manufactured goods shipped to other members of the Central American Common Market. There was similar change in the composition of the gross domestic product in Ecuador: the share of agriculture declined by 2-3 percentage points to about a third while that of manufacturing industry rose to about a sixth. The latter remained domestically oriented.

In the case of the United Arab Republic, the industrial expansion was reflected in a significant volume of exports only in the case of textile manufactures and petroleum products: from a small base, these items increased rapidly—at 17 per cent and 25 per cent a year, respectively—constituting at the end of the period about 80 per cent of the country's total exports of manufactures, which had in turn risen from 10 per cent to 23 per cent of total commodity exports.

The two other countries in the medium-growth group are Brazil and Costa Rica, both of which experienced an appreciable deceleration between the second half of the 1950's and the first half of the 1960's in the pace of their economic advance. The slackening was fairly general and its causation correspondingly complex. But one significant negative factor was a relatively poor export performance, reflecting in both instances the slow expansion in the demand for coffee, especially the Latin American *arabicas*. The lag in coffee earnings in Brazil reduced the contribution of this item to total export earnings to below 50 per cent by the mid-1960's, but there were very few more dynamic items to take its place: the share of manufactured goods—chiefly lumber, machinery and chemicals—almost doubled in the ten years under review, but barely reached 10 per cent of total earnings.

Coffee and other beverage crop exporters were numerous among the slow-growth countries: they include Colombia and Haiti, Cameroon and Togo, Ethiopia and Kenya, United Republic of Tanzania and Uganda, as well as Ceylon. Most of these countries have registered a low rate of increase in agricultural production, and as agriculture is a major sector—accounting for between a third of total output (in Colombia) and three-fourths (in Ethiopia)—the result is reflected in a generally less than average export performance and a relatively low rate of overall growth. Agriculture thus lost ground in most cases—to services in Ceylon, to mining in Uganda, to manufacturing in Colombia and several other countries.

The relative importance of agriculture declined in most of the remaining countries in the low-growth group—Burma, Mauritius, Morocco, Sudan, Argentina, Paraguay and Uruguay. In Burma, the relatively poor agricultural outcome caused a general deceleration in the rate of economic growth: the share of rice in exports dropped below two-thirds but as there was no ready alternative commodity, total export earnings declined sharply in the first half of the 1960's.

In the three African countries, the problem was partly one of agricultural instability. Variations in production, export volume and export prices in the case of sugar in Mauritius and cotton in the Sudan exerted a strong influence not only on export proceeds but also on government revenue and other activities in these countries. Even though the relative contribution of agriculture declined over the period—in favour of industry in the Sudan, services in Mauritius—dependence on the leading export crop was virtually as great as ever. In Morocco, the outturn was somewhat better in the first half of the 1960's than in the previous quinquennium, though there was no recovery in exports.

Of the three Latin American economies, Paraguay recorded the best agricultural performance. Much of it was export oriented and in the 1960's there were sizable gains in shipments of cotton, oilseeds, tobacco and meat as well as timber, and the result was a perceptible acceleration in the over-all rate of growth which had lagged seriously in the 1950's. In Argentina, meat and wheat continued to occupy the position of leading exports. Manufacturing increased less slowly than production as a whole, but this was largely in place of imports: it was not reflected in exports, indeed with less processed meat being shipped, manufactured goods constituted a smaller proportion of exports at the end of the period (10 per cent) than at the beginning (11 per cent). In Uruguay, the whole economy appears to have stagnated: the failure of the agricultural base to expand at all was reflected in the other sectors too and there was little or no structural shift.

### *The strategic sectors*

In one sense, the process of economic development is synonymous with industrialization: it involves increased specialization and division of labour, the adoption of technically improved methods of production and, generally, the provision of workers with more and better equipment. Thus, industry is not an end in itself but a means of raising productivity and the *per capita* availability of goods and services. In most developing countries, the strategic elements in the supply of goods on which balanced growth greatly depends are primary products produced for local use, and the inflow from abroad of things that are essential for economic growth—particularly investment goods—but which cannot currently be produced at home, at least at reasonable cost.

The most important production activities from the point of view of economic development therefore tend to be that portion of agriculture serving domestic requirements and those elements in various sectors that are capable of earning foreign exchange. In such circumstances, development strategy would seem to be best directed towards raising the efficiency of the domestic agricultural sector and of those portions of the agricultural, mining, manufacturing and service sectors capable of adding to the economy's import capacity.

Certainly, one of the conclusions to which the preceding section points is that while the process of economic development involves the progressive reduction in the relative contribution to total production of what is conventionally regarded as the agricultural sector, a lag in the expansion of agricultural output can have a very detrimental effect on the pace of over-all advance. The larger the sector, the more serious is the impact of a lag in it likely to be. But even where the sector is a relatively small one, an unsatisfactory performance can greatly aggravate supply problems for domestic consumers and user industries and for exports.

Development in the manufacturing sector can be very helpful in furnishing inputs to agriculture as it modernizes, in handling the increased farm output through national rather than local markets, and in adding to the unit value of exports once shipped in their primary state. It can also, in respect of a steadily widening range of goods, relieve the foreign exchange budget of the need to import. Though the sector is still a relatively small one in most developing countries (see table 7), its expansion in some cases has taken forms that may have tended to disturb the balance of the over-all development process. A local industry that produces goods of poor quality or at high cost can impose a serious burden on user concerns. This can be particularly troublesome in upsetting the terms of trade between

the industrial and agricultural sectors, accentuating the tendency to lag that often characterizes the latter. It can also handicap the export sector whose products have to compete on world markets.

The significance of this enhanced by another of the general conclusions emerging from the analysis of the previous section, namely, the close relationship between export performance and over-all economic growth. While a high rate of increase in exports gives no assurance of satisfactory economic growth, it is clear that most developing countries find it extremely difficult to achieve a high rate of growth unless they are able to expand their export earnings at an adequate pace. A graphical representation of this relationship is contained in figure I which suggests that there is a strong tendency for higher rates of increase in exports to be associated with higher rates of increase in production.

This relationship is in part merely a reflection of the fact that the proportion of the goods and services produced for sale abroad tends to be much higher in the developing countries than in the more advanced countries. This is particularly so in some of the least developed countries in which a relatively large export sector coexists with a traditional subsistence sector on which it has, in some cases, been superimposed. In over half the developing countries for which national accounts data are available—and this excludes many of the smaller and simpler economies—the ratio of exports to gross domestic product is in excess of 25 per cent.

Nor has this quantitative importance of exports tended to diminish in the period under review. Between 1955-1957 and 1963-1965, the ratio of exports to gross domestic product declined in about one-fourth of the developing countries and increased in three-fourths. And in over a third of the developing countries the increase in this ratio was 5 percentage points or more (see table 8).

The degree of export dependence is related in part to the state of underdevelopment—that is, to the extent of internal division of labour in the economy—and in part to the absolute size of the economy, which often tends to set a limit to the division of labour. In general, the larger the economy the smaller is the share of the export sector in total production likely to be (see figure II). Thus, among the countries with relatively low degrees of export dependence (10 per cent or less) are some of the major developing countries—Brazil, India, Mexico, Pakistan. It is significant that in all of these countries there was some reduction in the ratio of exports to gross domestic product in the period under review.

The significance of exports for economic growth is not merely a matter of the size of the export sector in relation to the rest of the economy. In most developing countries, not only is a large pro-

Table 7. Developing countries: changes in industrial structure, 1955-1965<sup>a</sup>

Country <sup>b</sup>	Gross domestic product growth rate (percentage per annum), 1955-1965	Percentage of gross domestic product contributed by							
		Agriculture <sup>c</sup>		Manufacturing <sup>d</sup>		Services <sup>e</sup>		Others <sup>f</sup>	
		1955	1965 <sup>g</sup>	1955	1965 <sup>g</sup>	1955	1965 <sup>g</sup>	1955	1965 <sup>g</sup>
Israel	8.5	12	9	23	25	55	56	10	10
China (Taiwan)	7.7	38	26	18	20	36	48	7	6
Panama	6.1	26	21	12	16	58	58	4	6
Thailand	5.8	39	35	12	12	46	47	4	6
Mexico	5.7	22	17	24	29	48	49	6	5
Venezuela	5.6	7	7	12	15	45	46	37	32
Iran	5.5	..	27	..	28	..	39	..	5
Guatemala	5.5	31	28	12	15	54	55	3	2
Republic of Korea	5.5	43	36	9	16	44	40	4	8
Peru	5.1	25	23	15	19	49	49	11	10
Nicaragua	4.9	41	35	11	13	44	48	4	4
Former Federation of Rhodesia and Nyasaland	4.9	20	20	10	13	36	43	34	25
El Salvador	4.9	33	29	14	17	44	45	9	9
Tunisia	4.7	..	23	..	14	..	53	..	11
Brazil	4.7	28	28	23	23	48	48	2	2
Costa Rica	4.5	39	32	11	14	47	50	3	4
Philippines	4.5	42	31	14	18	39	45	5	6
Nigeria	4.4	60	58	3	8	31	27	6	7
Honduras	4.4	43	43	11	14	39	38	7	6
Dominican Republic	4.3	28	24	15	16	51	54	6	6
Ecuador	4.2	36	34	15	17	43	42	6	6
Algeria	4.0	28	17	12	11	51	58	9	14
Pakistan	4.0	55	49	8	11	35	35	2	5
Chile	4.0	14	10	19	18	60	62	7	10
Colombia	3.9	35	32	15	18	41	43	8	7
Lebanon	3.9	16	18	13	12	67	67	4	4
Sudan	3.8	60	55	4	6	30	34	6	6
Uganda	3.5	60	59	8	8	27	30	6	4
Kenya	3.5	41	41	10	10	44	46	5	2
India	3.4	50	45	19	19	31	36	..	..
United Republic of Tanzania	3.4	..	57	..	4	..	34	..	5
Ethiopia	3.3	76	65	4	7	19	27	1	2
Morocco	3.1	32	32	12	14	44	43	13	11
Burma	3.1	35	32	8	15	51	49	6	4
Paraguay	3.1	38	36	18	17	43	45	2	2
Argentina	3.1	20	17	30	35	45	43	5	5
Mauritius	3.0	31	25	20	15	44	53	5	7
Ceylon	2.9	54	46	6	6	32	42	9	6
Bolivia	2.2	25	26	17	15	41	46	17	13
Haiti	1.4	49	48	11	12	38	36	1	3
Uruguay	0.5	22	20	20	21	53	55	5	4

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Yearbook of National Accounts Statistics*.

<sup>a</sup> Based on data in prices of 1960

<sup>b</sup> Countries are ranked in descending order of growth in gross domestic product.

<sup>c</sup> Including forestry and fishing.

<sup>d</sup> Including water and power.

<sup>e</sup> Trade, finance, insurance, public administration and defence.

<sup>f</sup> Residual, including mining, construction and transport and communications

<sup>g</sup> 1964 in the case of the former Federation of Rhodesia and Nyasaland, Nigeria, Pakistan, Lebanon, Sudan, Kenya, India and Burma.

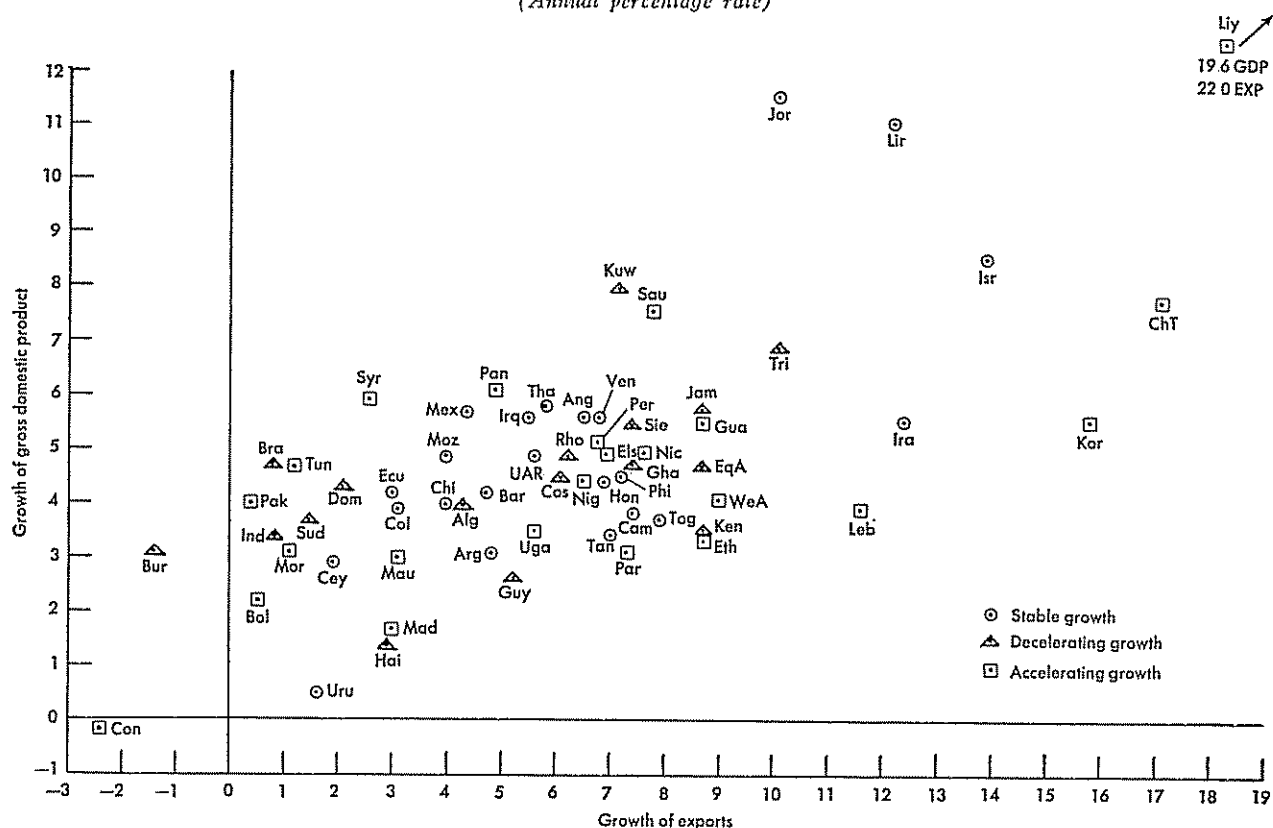
<sup>h</sup> Mining and construction are included in manufacturing; transport and communications in services.

portion of domestic output produced specifically for external markets, with little or none of many export commodities being absorbed by the local economy, but the export sector serves two other strategic roles: it provides an important flow of income which exerts a multiplier effect on the local economy and it also provides foreign exchange by which goods

that are not produced internally may be acquired from abroad.

The income flow generated by export sales goes in part to local suppliers of labour, raw materials, components, power, transport and so on. The flows and their proportions differ from case to case—depending largely on whether the export is based on

Figure I. Developing countries: rates of growth in real exports and in gross domestic product, 1955-1965  
(Annual percentage rate)



Alg	Algeria	Els	El Salvador	Kuw	Kuwait	Rho	Former Federation of Rhodesia and Nyasaland
Ang	Angola	EqA	Former French Equatorial Africa	Leb	Lebanon	Sau	Saudi Arabia
Arg	Argentina	Eth	Ethiopia	Lir	Liberia	Sie	Sierra Leone
Bar	Barbados	Gha	Ghana	Liy	Libya	Sud	Sudan
Bol	Bolivia	Gua	Guatemala	Mad	Madagascar	Syr	Syria
Bra	Brazil	Guy	Guyana	Mau	Mauritius	Tan	United Republic of Tanzania
Bur	Burma	Hai	Haiti	Mex	Mexico	Tha	Thailand
Cam	Cameroon	Hon	Honduras	Mor	Morocco	Tog	Togo
Cey	Ceylon	Ind	India	Moz	Mozambique	Tri	Trinidad and Tobago
Chi	Chile	Ira	Iran	Nic	Nicaragua	Tun	Tunisia
ChT	China (Taiwan)	Iraq	Iraq	Nig	Nigeria	Uga	Uganda
Col	Colombia	Isr	Israel	Pak	Pakistan	UAR	United Arab Republic
Con	Democratic Republic of the Congo	Jam	Jamaica	Pan	Panama	Uru	Uruguay
Cos	Costa Rica	Jor	Jordan	Par	Paraguay	Ven	Venezuela
Dom	Dominican Republic	Ken	Kenya	Per	Peru	WeA	Former French West Africa
Ecu	Ecuador	Kor	Republic of Korea	Phi	Philippines		

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Yearbook of National Accounts Statistics*.

Table 8. Developing countries: ratio of exports to gross domestic product, 1955-1957 and 1963-1965

Country <sup>a</sup>	1955-1957 (Percentage)	1963-1965 (Percentage)	Change, 1955-1957 to 1963-1965 (percentage points)
Congo (Democratic Republic of)	37.3	27.8	-9.4
Burma	20.3	13.1	-7.1
Tunisia	24.8	18.4	-6.4
Kuwait	71.6	66.8	-4.8
Bolivia	21.5	17.1	-4.4
Morocco	25.5	21.7	-3.8
Dominican Republic	22.1	18.7	-3.4
Panama	33.3	29.9	-3.4
Ceylon	32.1	28.9	-3.2

Table 8. Developing countries: ratio of exports to gross domestic product, 1955-1957 and 1963-1965 (continued)

Country <sup>a</sup>	1955-1957 (Percentage)	1963-1965	Change, 1955-1957 to 1963-1965 (percentage points)
Brazil	8.6	5.7	-2.9
Syria	22.3	19.6	-2.6
Ecuador	19.0	17.0	-2.1
Mozambique	14.1	12.7	-1.4
Colombia	14.7	13.5	-1.2
Thailand	20.8	19.7	-1.1
India	6.5	5.4	-1.0
Mexico	11.2	10.2	-1.0
Pakistan	8.5	7.7	-0.8
Liberia	53.5	53.7	0.2
Jordan	13.9	14.1	0.3
Angola	24.5	25.0	0.5
Sudan	19.4	20.0	0.6
Madagascar	14.4	15.4	0.9
Chile	11.2	12.3	1.1
Uruguay	14.2	15.5	1.4
Argentina	10.3	12.2	1.9
Honduras	18.5	20.4	2.0
United Arab Republic	16.3	18.4	2.1
Mauritius	47.0	49.3	2.3
Venezuela	32.1	34.5	2.4
Nigeria	17.1	19.6	2.5
Barbados	49.8	52.4	2.6
Haiti	12.9	16.1	3.3
Republic of Korea	2.1	5.8	3.7
Peru	18.6	22.8	4.2
Ghana	24.9	29.2	4.4
El Salvador	21.0	25.4	4.4
Sierra Leone	26.8	31.3	4.5
Paraguay	14.7	19.6	4.9
Guatemala	10.6	15.6	5.0
Saudi Arabia	55.6	60.6	5.0
Costa Rica	17.6	22.7	5.1
Former French West Africa <sup>b</sup>	12.0	17.8	5.8
Ethiopia	7.8	13.9	6.2
Israel	8.6	15.0	6.3
Former Federation of Rhodesia and Nyasaland	38.9	46.1	7.2
United Republic of Tanzania	24.7	32.2	7.5
Philippines	14.2	22.2	8.0
Iran	13.3	21.3	8.0
Uganda	24.3	32.5	8.2
Iraq	35.3	43.6	8.3
Jamaica	28.0	36.4	8.3
Algeria	23.1	31.6	8.5
Former French Equatorial Africa <sup>c</sup>	14.6	23.3	8.7
Nicaragua	22.3	31.1	8.8
Cameroon	16.8	25.7	9.0
China (Taiwan)	6.8	15.8	9.1
Kenya	26.7	42.0	15.3
Togo	16.5	32.3	15.8
Guyana	42.2	58.7	16.5
Lebanon	21.9	43.1	21.2
Trinidad and Tobago	55.9	77.4	21.5
Libya	31.2	62.1	30.9
Median	20.3	21.7	2.6

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Yearbook of National Accounts Statistics*.

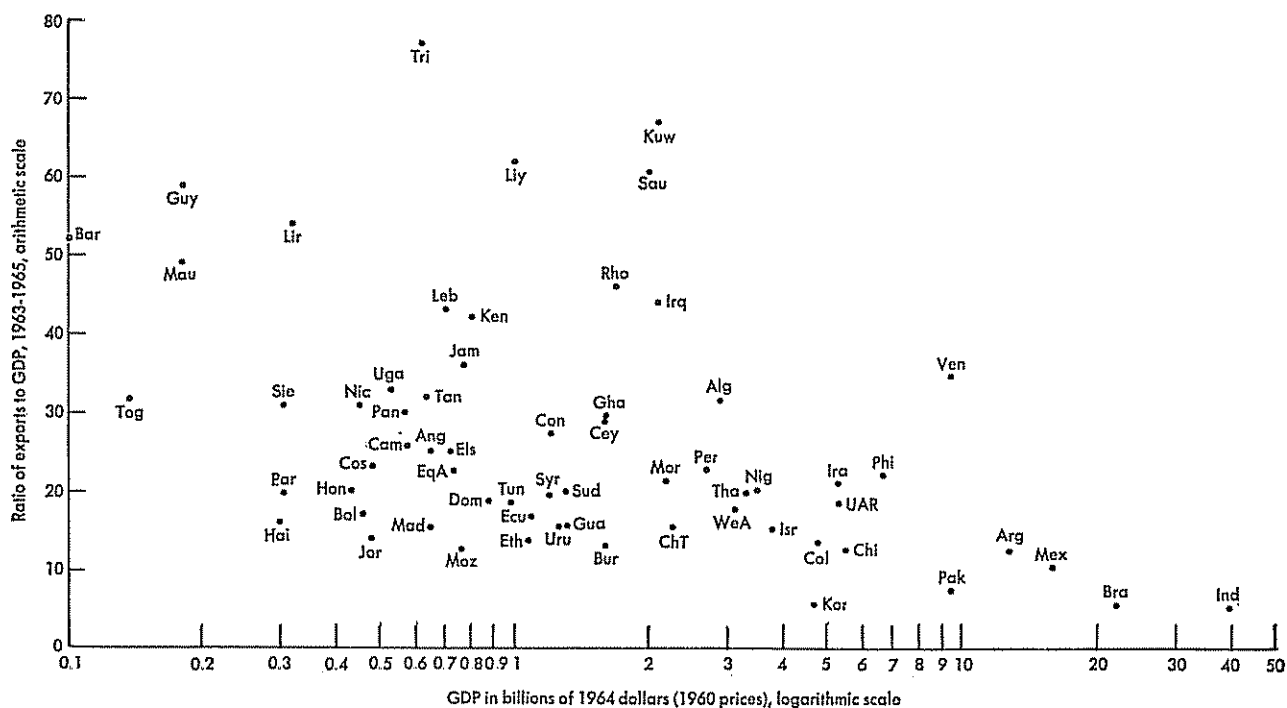
<sup>a</sup> Countries are ranked in ascending order of

change in the ratio of exports to gross domestic product between the first and second periods.

<sup>b</sup> Dahomey, Guinea, Ivory Coast, Mali, Mauritania, Niger, Senegal, Upper Volta.

<sup>c</sup> Central African Republic, Chad, Congo (Brazzaville), Gabon.

Figure II. Developing countries: relationship between export ratio and gross domestic product, 1963-1965



Source: See table 8. See figure I for legend.

peasant crops, on plantations, on mines or on manufacturing industries—but their function in generating successive rounds of expenditure is essentially similar. So, too, is the expansionary or contractionary impact on the economy of a rise or a decline in export earnings.

The income generated by an export activity also goes in part to the Government through the tax system. It is characteristic of the fiscal structure of many developing countries that a substantial portion of total revenue is derived from export activities either through taxes on the commodities themselves or through taxes on the incomes of those involved in producing them. Here again, fluctuations in export proceeds have a direct and corresponding effect on government revenue and hence on the level of public expenditure and on the way in which it is financed.

In most developing countries, export incomes also make a major contribution to investment, through the Government's fiscal arrangements or through the producers themselves, especially when these are corporate entities. In so far as it represents a residual—after costs and taxes have been paid—the profit available for reinvestment is particularly sensitive to movements in export earnings and prices.

Exports also provide the means for translating domestic savings into fixed capital formation. In many developing countries, the state of industrial development leaves them dependent on imports for

many of the items of plant and equipment necessary for extending their capital base. In the case of the manufacturing sector, this dependence on imports is not limited to the equipment necessary for the initial investment; it often affects the various current inputs of the factory processes as well as components and replacements required for the maintenance of the plant. Thus shortage of foreign exchange can have a direct and harmful effect on the efficiency of capital utilization. As capital is itself a particularly scarce factor in most developing countries, the foreign exchange constraint can seriously slow down or distort the process of economic development.

While a high rate of expansion in exports cannot by itself ensure a satisfactory pace of over-all economic growth, poor export performance tends to make economic development a much more difficult and hazardous process than it would otherwise be, accentuating the crucial foreign exchange constraint and increasing the dependence of the country in question upon resource transfers outside the framework of trade.

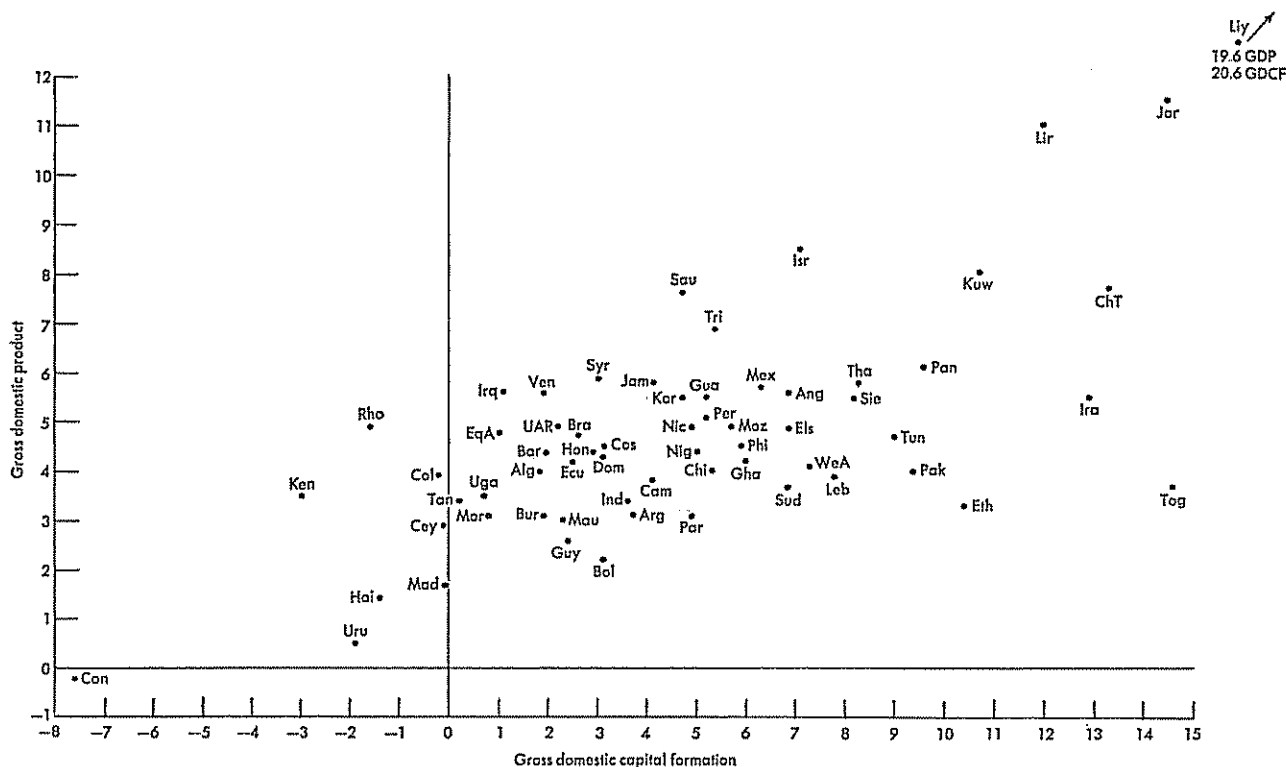
#### *Changes in capital formation*

As in all other aspects of the development process, there is considerable diversity among the developing countries in respect of savings capacity and performance, access to external resources to supplement domestic savings and efficiency of investment. Nevertheless a sufficiently broad base of common experience exists to permit the drawing of a number of

general conclusions. The most basic of these relates to the causative links between savings, investment and growth: higher *per capita* incomes permit higher rates of savings, higher rates of capital formation and, in due course, higher rates of economic growth. It is this relationship that makes it difficult for poor countries to step up the pace of their development;

at the same time, however, it makes the process a cumulative one, the first advance facilitating the second and the second the third to the point of so-called self-sustaining growth. The general positive relationship between rates of increase in investment and rates of growth in production over the period 1955-1965 is illustrated in figure III.

**Figure III. Developing countries: growth in real gross domestic capital formation and gross domestic product, 1955-1965**  
(Annual percentage rate)



Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Yearbook of National Accounts Statistics*. See figure I for legend.

Table 9 brings out the great diversity in savings performance. There are countries with relatively high *per capita* production—over \$300 a year—that managed to save a much smaller proportion of total income than the developing country average. Barbados, Chile, Costa Rica, Guatemala, Panama all recorded savings ratios of 10 per cent or less in 1963-1965. Conversely, there are countries at the other end of the *per capita* income scale—with less than \$100 a year—that saved over-average proportions. These include Burma, Togo and Uganda. There are also many countries whose savings ratios were lower in the mid-1960's than they were in the mid-1950's despite a significant rise in production over the period.

In the aggregate, however, the combined savings ratio of the developing countries was appreciably

higher in 1963-1965 (15 per cent) than at the beginning of the period (12 per cent). And the proportion of countries with over-average savings ratios was significantly greater (57 per cent) in the high-income group (*per capita* gross domestic product in excess of \$200 a year) than in the lower-income groups—50 per cent in the \$100-200 *per annum* group, 33 per cent in the under-\$100 *per annum* group.

The group of countries that achieved a relatively stable rate of growth over the two quinquennia—1955-1960 and 1960-1965<sup>1</sup>—increased their combined savings ratios from about 13 per cent of gross

<sup>1</sup> Listed in descending order of average 1955-1965 growth rate, this group consists of Jordan, Liberia, Israel, Thailand, Mexico, Iraq, Angola, Venezuela, Iran, Mozambique, United Arab Republic, Philippines, Honduras, Ecuador, Chile, Colombia, Cameroon, Togo, United Republic of Tanzania, Argentina, Ceylon and Uruguay.

Table 9. Developing countries: rates of growth in gross domestic capital formation and changes in savings and investment ratios, 1955-1965

Country* and per capita gross domestic product	Rate of growth in gross domestic capital formation (percentage per annum)		Ratio to gross domestic product of			
	1955-1960	1960-1965	Gross domestic savings <sup>b</sup> (Percentage)		Gross domestic capital formation	
			1955-1957	1963-1965	1955-1957	1963-1965
Over \$300 per annum						
Kuwait	108	10.7	36	35	12	14
Israel	6.1	8.1	10	14	27	27
Venezuela	-2.8	6.6	22	27	28	18
Libya	30.6	10.5	18	32	29	30
Chile	4.2	6.4	9	10	11	13
Trinidad and Tobago	12.5	-1.6	14	21	26	23
Argentina	6.7	0.7	16	20	17	19
Panama	10.9	8.2	6	6	13	19
Jamaica	5.8	2.3	12	16	24	18
Uruguay	-0.8	-3.1	12	13	18	15
Mexico	6.1	6.4	12	12	16	15
Barbados	7.8 <sup>c</sup>	-1.1	16	8	28	23
Saudi Arabia	-5.2	14.6	12	30	10	7
Costa Rica	4.8	1.3	5	8	20	16
Liberia	17.8	6.1	22	24	19	28
Guatemala	1.1	9.3	9	10	15	12
\$200 - \$300 per annum						
Nicaragua	-2.5	12.2	7	15	17	19
Brazil	7.2	-2.0	16	15	17	15
Lebanon	7.8	7.9	5	16	16	20
Guyana	9.5	-4.7	17	12	21	18
Mauritius	11.4	-6.8	26	21	13	16
Iraq	1.4	0.7	15	16	22	12
Colombia	-0.6	0.2	17	15	24	18
Jordan	18.3	10.6	-12	1	13	16
El Salvador	7.0	6.8	10	11	12	13
Algeria	11.6	-8.1	9	20	22	15
Peru	2.0	8.5	18	15	28	22
Dominican Republic	-7.5	13.7	17	7	21	19
Iran	19.1	6.6	6	17	10	17
Tunisia	3.7	14.3	3	10	12	23
Syria	2.8	3.2	-6	17	14	14
Philippines	5.6	6.3	7	15	9	11
Ecuador	2.9	2.1	13	12	16	14
Honduras	1.1	4.7	10	10	16	15
China (Taiwan)	14.0	12.7	7	18	14	22
\$100 - \$199 per annum						
Ghana	8.4	3.6	13	24	18	25
United Arab Republic	2.1	2.3	9	13	15	15
Republic of Korea	-0.4	9.9	—	9	14	16
Morocco	-2.9	4.5	14	13	11	12
Paraguay	7.4	2.5	12	13	14	16
Former Federation of Rhodesia and Nyasaland	-0.3	-2.9	15	20	34	15
Ceylon	0.8	-0.9	14	15	15	13
Sierra Leone	4.5	11.8	1	7	12	13
Angola	6.6	7.2	23	26	26	26
Bolivia	-2.4	8.6	10	7	17	18
Former French Equatorial Africa	8.3	-6.3	8	15	21	15
Cameroon	0.9	7.4	9	16	12	11
Former French West Africa	6.2	8.4	—	7	10	14
Mozambique	2.0	9.5	18	22	26	28
Thailand	6.0	10.5	16	19	15	22
Madagascar	-0.3	0.1	8	7	11	10
Under \$100 per annum						
Pakistan	8.0	10.8	7	10	7	16
Sudan	17.2 <sup>c</sup>	-0.4	9	11	10	14
Kenya	-3.2	-2.9	2	11	23	11

Table 9. Developing countries: rates of growth in gross domestic capital formation and changes in savings and investment ratios, 1955-1965 (*continued*)

Country <sup>a</sup> and per capita gross domestic product	Rate of growth in gross domestic capital formation (Percentage per annum)		Ratio to gross domestic product of			
			Gross domestic savings <sup>b</sup> (Percentage)		Gross domestic capital formation (Percentage)	
	1955-1960	1960-1965	1955-1957	1963-1965	1955-1957	1963-1965
Togo	17.6	11.5	1	24	5	21
Congo (Democratic Republic of)	-16.4	1.3	21	12	30	13
India	7.5	-0.3	12	11	13	14
Uganda	-6.1	7.5	14	19	17	12
Haiti	-3.6	0.8	2	9	7	6
Nigeria	3.1	6.9	10	10	12	13
United Republic of Tanzania	-6.0	6.3	17	13	19	12
Burma	2.0	1.8	23	17	21	19
Ethiopia	8.7	12.1	3	10	4	11
22 countries with relatively steady growth rates <sup>d</sup>	4.7	5.1	13	16	17	17
23 countries with increased growth rates <sup>d</sup>	3.4	10.8	8	12	13	16
18 countries with reduced growth rates <sup>d</sup>	8.3	-0.7	13	14	16	15
Average, above 63 countries	5.5	3.7	12	15	16	16
Excluding 15 countries with large 1955-1960 capital inflows <sup>e</sup>	6.0	3.7	12	13	15	16

Source: See table 2.

<sup>a</sup> Countries are ranked in descending order of per capita gross domestic product in dollars (1960 prices).

<sup>b</sup> Gross domestic savings equal gross domestic product minus total (government and private) consumption expenditure plus net factor income from abroad.

<sup>c</sup> 1954-1959 growth rates.

<sup>d</sup> Based on a comparison of average growth rates, 1955-1960 and 1960-1965 (see figure 1).

<sup>e</sup> Excluding, in descending order of per capita gross domestic product, Venezuela, Libya, Trinidad and Tobago, Jamaica, Saudi Arabia, Iraq, Algeria, Iran, Syria, former Federation of Rhodesia and Nyasaland, former French Equatorial Africa, Cameroon, Togo, Democratic Republic of the Congo, Uganda.

domestic product in the mid-1950's to about 16 per cent of gross domestic product in the mid-1960's. The only countries in the group to register a reduction in their savings ratios were three with below-average growth rates—Colombia, Ecuador and United Republic of Tanzania.

The countries that achieved a measurable acceleration in growth<sup>2</sup> also registered a substantial increase in their average savings ratio: it was at the low level of under 8 per cent of gross domestic product at the beginning of the period and had risen 5 percentage points to nearer the developing-country average by the end of the period. A somewhat higher proportion of countries in this group (than in the stable-growth group) registered a decline in savings ratios over the ten years, but they were concentrated even more at the low-growth end of the spectrum—Bolivia, Democratic Republic of the Congo, Madagascar, Mauritius and Morocco. The only country with an over-average rate of growth to experience a reduction in savings ratio was Peru, and even after

this decline the ratio remained above the developing-country average. Among the high-growth countries—China (Taiwan), Libya, Republic of Korea, Saudi Arabia and Syria, for example—there were some dramatic increases in savings rates; while among the lower-growth countries the increase in production was enough to double or even treble the rate of savings, as in the case of Ethiopia, Lebanon, Nicaragua and Tunisia.

Among the decelerating countries,<sup>3</sup> the incidence of reduced savings ratios was significantly greater; it occurred in almost 40 per cent of the group, including Barbados, Brazil, Burma, Dominican Republic, Guyana, India and Kuwait. Thus, notwithstanding the increase in production—5 per cent a year in the first quinquennium and 3 per cent a year in the second—and a marked improvement in the savings efforts of a number of small countries in Africa and the Caribbean area, the average savings ratio for the group as a whole was only fractionally higher in the mid-1960's than in the mid-1950's.

<sup>2</sup> Listed in descending order of average 1955-1965 growth rate, this group consists of Libya, China (Taiwan), Saudi Arabia, Panama, Syria, Guatemala, Republic of Korea, Peru, Nicaragua, El Salvador, Tunisia, Nigeria, former French West Africa, Pakistan, Lebanon, Uganda, Ethiopia, Morocco, Paraguay, Mauritius, Bolivia, Madagascar and the Democratic Republic of the Congo.

<sup>3</sup> Listed in descending order of average 1955-1965 growth rate, this group consists of Kuwait, Trinidad and Tobago, Jamaica, Sierra Leone, Barbados, former Federation of Rhodesia and Nyasaland, former French Equatorial Africa, Brazil, Costa Rica, Dominican Republic, Ghana, Algeria, Kenya, India, Burma, Sudan, Guyana and Haiti.

Because the bulk of capital formation is financed by domestic savings, the over-all pattern of investment changes conforms closely to the evolution of savings. As access to external resources differs markedly from one country to another, however, the changes in the investment rates in individual countries seldom followed those in savings; in some cases, indeed, they moved in opposite directions. In most countries, investment rates have continued to exceed savings rates, but with the general rise in the latter the relative contribution of foreign savings was appreciably smaller in the mid-1960's than in the mid-1950's. For the developing countries as a whole, while the savings rate rose by almost a fourth, the investment rate rose by less than 1 per cent—just under 16 per cent to just over 16 per cent.

One of the reasons for the narrowing of the difference between the investment rates and the domestic savings ratio is the notable swing-around in the movement of capital into mineral (and especially petroleum) development. The mid-1950's saw a massive flow of external resources into Algeria, Iran, Iraq, Libya, Syria, Trinidad and Tobago and Venezuela for the building up of petroleum mining, transporting and refining capacity and a similar if smaller flow into the then Belgian Congo, French Equatorial Africa and Federation of Rhodesia and Nyasaland, and into Jamaica in connexion with the exploitation of various non-ferrous ores. By the mid-1960's, this flow had either been reversed or reduced to a trickle. On a much smaller scale, there was a swing from inflow to outflow related to mineral or metal development in Cameroon (aluminium), Togo (phosphates) and Uganda (copper). The net outflow of resources from Saudi Arabia was substantially greater at the end of the period than at the beginning.

The swings in the opposite direction were few in number and small in size. They include investment on an increased scale in iron ore development in Liberia and Mauritania, in petroleum refining in Panama and in various minerals in Bolivia. Though the inflow of external resources contributed less to capital formation in the developing countries in the mid-1960's than in the mid-1950's, the offset of the earlier investment was discernible in improved savings capacity. While the combined savings ratio of all developing countries rose from about 12 per cent to about 15 per cent, the savings ratio of the non-mineral-producing countries rose only marginally—from 12 per cent to 13 per cent.

In general, the larger developing countries finance the overwhelming bulk of their own capital formation. External resources provide investment of less than 1 per cent of the gross domestic product of such countries as Argentina and Brazil and only 3-4 per cent of the gross domestic product of Mexico. There was a sharp rise in the use of external capital

by India and Pakistan, but in the mid-1960's it amounted to only about 3 per cent of the gross domestic product of the former and about 6 per cent of the gross domestic product of the latter. Offsetting these increases were notable reductions in the relative importance of foreign resources in China (Taiwan), Colombia, Israel, Jordan, Kenya, Republic of Korea and United Republic of Tanzania. In Colombia, Kenya and Tanzania, this resulted in a sharp decline in investment ratios; in China (Taiwan) and Jordan, however, the improvement in domestic savings was sufficient to permit a rise in the investment ratio—to well above the developing-country average in the case of China (Taiwan).

#### THE SALIENT PROBLEMS AND THEIR MAGNITUDE

The developing countries are carrying with them into the 1970's a constellation of economic and social problems. For each country, the challenge of the next decade will be to formulate and execute a development strategy to identify and overcome the particular group of obstacles holding back desired gains in productivity, incomes and welfare. The content and nature of such a strategy will differ from country to country, but, as implied in the analysis of the 1955-1965 trends in preceding sections, there are many common problems which almost all developing countries will have to tackle. Priorities will have to be decided in each case and the order and intensity of the attack will need to be carefully determined in accordance with the specific requirements and possibilities of the country concerned.

Perhaps the most basic feature of the situation is the relative poverty of the developing countries. Accounting for almost half of the world's population outside mainland China, they produce a mere eighth of the total output of goods and services. While output data cannot be interpreted as a measure of welfare, the fact that the average *per capita* gross product is about eleven times as high in the developed market economies as in the developing countries is indicative of the handicap that the latter face in setting aside resources for development.

Nor does the average figure for output adequately measure the magnitude of the task facing large parts of the developing world. In the mid-1960's about three-fourths of its population lived in countries with a *per capita* output of less than \$200 a year, and about two-thirds in countries in which *per capita* output was less than \$100 a year (see table 10). And within countries there is also a marked skewness in the distribution of income. Though this cannot be quantified on a global basis, data that have been compiled for individual countries suggest that the majority of the population of the developing world have incomes appreciably below even this low level.

Table 10. Distribution of developing countries<sup>a</sup> by per capita output, 1965

Per capita gross domestic product (current dollars)	Number of countries	Population (percentage)
100 and under	17	65
101 to 200	14	9
201 to 300	19	18
301 to 500	7	4
501 and over	10	4
Total	67	100

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Yearbook of National Accounts Statistics*.

<sup>a</sup> Countries in each category are as follows (in ascending order of per capita gross domestic product): \$100 and under: Malawi, Ethiopia, Burma, Nigeria, Nepal, United Republic of Tanzania, Democratic Republic of the Congo, Niger, Uganda, Gambia, Haiti, Kenya, Togo, India, Republic of Korea, Pakistan, Sudan; \$101 to 200: Thailand, Mauritania, Republic of Viet-Nam, Cambodia, Central African Republic, Sierra Leone, Ceylon, Bolivia, Senegal, Morocco, Tunisia, China (Taiwan), Ecuador, Paraguay; \$201 to 300: Jordan, Algeria, Ivory Coast, Zambia, Honduras, Mauritius, Dominican Republic, Brazil, Southern Rhodesia, Philippines, Peru, Iran, Liberia, El Salvador, Ghana, Colombia, Malaysia, Guayana, Guatemala; \$301 to 500: Nicaragua, Gabon, Barbados, Costa Rica, Mexico, Jamaica, Panama; \$501 and over: Singapore, Uruguay, Chile, Trinidad and Tobago, Libya, Argentina, Venezuela, Netherlands Antilles, Israel, Kuwait.

The dimensions of this poverty problem are further accentuated by a similar skewness in the growth of recent years. While three-fourths of the developing countries with national accounts statistics achieved a growth rate in excess of 3.5 per cent per annum in the period 1955-1965, and over a third a growth rate of more than 5 per cent, half of the population of the developing world lived in countries in which production rose by less than 3.5 per cent a year (see table 11). For the bulk of these people, per capita incomes increased hardly at all during the period under review.

#### Human resources

There was a time when average annual increases in gross product of between 2 per cent and 3.4 per cent would have been hailed as a major achievement in the raising of levels of living in traditional and largely pre-industrial societies. Nowadays, however, such gains are quite inadequate: their effect on levels of living is very largely eroded by rates of population increase that have risen, within less than a generation, to much the same order of magnitude. Advances in medicine and the spread of public health measures have halved the death rate in many developing countries, with a steep decline in infant mortality leading the way. But birth rates have not yet started on a parallel downward course: at over 40 per 1,000 they are still about double the average for the more advanced countries. This has made for a rapid acceleration in the rate of natural increase.

Table 11. Distribution of developing countries by rate of growth of real gross domestic product, 1955-1965

Annual average growth of gross domestic product (percentage)	Countries <sup>a</sup>		Gross domestic product (per- centage)	Popula- tion, 1965
	Number	Per- centage		
8.0 and over	5	8	4	1
6.5 to 7.9	3	5	3	2
5.0 to 6.4	13	21	24	14
3.5 to 4.9	27	43	38	36
2.0 to 3.4	11	17	29	46
Under 2.0	4	6	2	2
Total	63	100	100	100

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on data from the Statistical Office of the United Nations and national sources.

<sup>a</sup> Countries in each category are as follows (in descending order of growth of gross domestic product, 1955-1965): 8.0 per cent and over: Libya, Jordan, Liberia, Israel, Kuwait; 6.5 to 7.9 per cent: China (Taiwan), Saudi Arabia, Trinidad and Tobago; 5.0 to 6.4 per cent: Panama, Syria, Jamaica, Thailand, Mexico, Iraq, Angola, Venezuela, Sierra Leone, Iran, Guatemala, Republic of Korea, Peru; 3.5 to 4.9 per cent: Nicaragua, Mozambique, former Federation of Rhodesia and Nyasaland, El Salvador, United Arab Republic, former French Equatorial Africa, Tunisia, Brazil, Costa Rica, Philippines, Nigeria, Honduras, Barbados, Dominican Republic, Ghana, Ecuador, former French West Africa, Algeria, Pakistan, Chile, Colombia, Lebanon, Cameroon, Sudan, Togo, Uganda, Kenya, 2.0 to 3.4 per cent: Madagascar, Haiti, Uruguay, Democratic Republic of the Congo.

Only a small fraction of the population of the developing world lives in countries in which the rate of population increase between 1955 and 1965 was less than 2 per cent a year, while over a third lives in countries in which it was over 2.5 per cent (see table 12). In the more advanced countries, on the other hand, the upsurge in population growth that occurred in the early post-war period was rapidly receding. The contrast between the developing countries and the more advanced countries has thus sharpened dramatically in recent years. In the 1950's, the rate of population growth in the developing countries was not quite double that registered in the developed market economies; in the 1960's it has been nearer treble.

One consequence of this acceleration in growth rates has been a rapid juvenescence of the population. The 1960 censuses showed that while about 30 per cent of the population was under fifteen years of age in the more advanced countries, the proportion in the developing countries was in excess of 40 per cent. Though there was some offset to this high ratio by way of lower proportions of old people, the general effect of the acceleration has been to raise the proportion of dependent persons in the population. This has tended to accentuate the difficulties of promoting economic development: much of the increment in production has been absorbed

Table 12. Developing countries: distribution by rate of growth in population, 1955-1965

Annual growth rate (percentage)	Number of countries <sup>a</sup>	Countries 1965 (Percentage)
3.5 and over	5	8
3.0-3.4	16	25
2.5-2.9	17	27
2.0-2.4	10	16
Under 2.0	15	24
Total	63	100

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on data taken from the the Statistical Office of the United Nations.

<sup>a</sup> Countries in each category are as follows (in descending order of growth in population): 3.5 per cent and over: Kuwait, Costa Rica, Israel, Libya, Dominican Republic; 3.0-3.4 per cent: Venezuela, China (Taiwan), Mexico, Iraq, Jordan, Ecuador, Philippines, Honduras, Colombia, El Salvador, Guatemala, Madagascar, Nicaragua, Trinidad and Tobago, Syria, Mauritius; 2.5-2.9 per cent: Panama, Thailand, Brazil, Kenya, Guyana, Sudan, Peru, former Federation of Rhodesia and Nyasaland, Republic of Korea, Morocco, former French West Africa, Ghana, Iran, Togo, Paraguay, Ceylon, United Arab Republic; 2.0-2.4 per cent: Uganda, Lebanon, Chile, Burma, India, Democratic Republic of the Congo, Cameroon, Pakistan, Algeria, Nigeria; under 2.0 per cent: Haiti, United Republic of Tanzania, Jamaica, former French Equatorial Africa, Ethiopia, Argentina, Saudi Arabia, Liberia, Angola, Uruguay, Bolivia, Mozambique, Tunisia, Sierra Leone, Barbados.

in the maintenance of consumption rates in the larger and younger population.

The particularly rapid rise in the child population has aggravated another problem facing the developing countries, namely, the low level of the forms of knowledge and skill that are most urgently required in the economic development process. The struggle to raise literacy rates and educational levels in general has been greatly complicated by the upsurge in the school-age population. Budgets have been severely strained by the effort to raise the proportion of the population that can be provided with a basic formal education. In most developing countries, school enrolment ratios—that is the proportion of the population registered as school attendants—have been increased without particular regard to the growth in output of goods and services. Expenditure on education has absorbed an increasing share of the gross domestic product, particularly among slow-growing countries (see table 13). In some countries, even the raising of literacy rates has not prevented the absolute number of illiterates from increasing. Thus the dilemma that faces many developing countries of whether to broaden the educational base or first to assure the training of cadres with adequate administrative and technical skills has been made even more difficult to resolve.

The rapid expansion in population has also complicated the problems arising from internal migration. The form of migration most closely identified with the development process is the townward movement

Table 13. Developing countries: rates of increase in per capita production and in school enrolment ratio

Country <sup>a</sup>	(Percentage per annum)	
	Per capita GDP, <sup>b</sup> 1955-1965	School enrolment ratio, <sup>c</sup> 1955-1963
Libya	16.7	9.0
Jordan	8.6	1.8
Saudi Arabia	6.1	8.2 <sup>d</sup>
Israel	4.9	2.7
China (Taiwan)	4.6	4.3
Sierra Leone	4.5	10.1
Panama	3.3	2.0
Syria	3.1	4.0
Iran	3.0	8.4
Republic of Korea	2.8	1.9
Iraq	2.6	10.6
Guatemala	2.5	4.5
Mexico	2.5	4.3
Nigeria	2.5	0.4
United Arab Republic	2.5	3.8
Peru	2.4	4.3
Venezuela	2.3	7.1
Nicaragua	2.1	2.3
Algeria	2.1	9.5 <sup>d</sup>
Pakistan	2.0	3.7
El Salvador	1.9	4.1
Brazil	1.8	1.8
Cameroon	1.7	7.8 <sup>d</sup>
Chile	1.7	2.2
Ethiopia	1.7	9.7
Ghana	1.7	12.9
Argentina	1.5	0.3
Philippines	1.4	1.4
Honduras	1.3	6.0
India	1.3	4.7
Togo	1.2	6.2 <sup>d</sup>
Ecuador	1.1	2.6
Sudan	1.0	10.7
Bolivia	0.9	6.1
Colombia	0.8	4.2
Kenya	0.7	6.5
Costa Rica	0.6	3.1
Paraguay	0.6	0.9
Ceylon	0.5	2.5
Morocco	0.5	10.5
Mauritius	0.2	3.5
Uruguay	-0.8	1.3
Madagascar	-1.3	6.6
Congo (Democratic Republic of)	-2.3	4.8 <sup>d</sup>

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Yearbook of National Accounts Statistics*, *Demographic Yearbook*, *Monthly Bulletin of Statistics*, and United Nations Educational, Scientific and Cultural Organization, *Statistical Yearbook* (Paris).

<sup>a</sup> Arranged in descending order of rate of growth in per capita GDP.

<sup>b</sup> At 1960 prices.

<sup>c</sup> Based on ratio of number of students per 1,000 total population, 1955-1963, except India, 1955-1962; Iran and Peru, 1955-1964; Bolivia, Costa Rica, Morocco, Nigeria, 1956-1963.

<sup>d</sup> Excluding higher education (third level).

of rural elements in the population. This is a worldwide phenomenon: between 1920 and 1960, urban populations expanded at more than double the overall average rate. In the less developed parts of the

world, the contrast was even sharper: while rural and small-town populations grew at about 1.0 per cent a year, urban populations (defined as those living in communities of over 20,000 persons) grew at almost 4 per cent a year and big-city populations (of over 500,000 persons) at almost 6 per cent.<sup>4</sup> As a result of these differential growth rates, the proportion of the population of the less developed areas living in urban communities has risen from 6 per cent in 1920 to 15 per cent in 1960 and the proportion in big cities from 1 per cent to 6 per cent (see table 14). These ratios are only a fourth to a third

**Table 14. Distribution of world population by size of locality, 1920, 1950 and 1960**

(Percentage)			
Region and size of locality	1920	1950	1960
<i>World</i>			
20,000 and over	14	21	25
500,000 and over	6	9	12
<i>More developed<sup>a</sup></i>			
20,000 and over	29	40	46
500,000 and over	14	19	23
<i>Less developed<sup>a</sup></i>			
20,000 and over	6	11	15
500,000 and over	1	4	6

*Source:* Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on "World demographic survey, rural and urban population, 1920-1980".

<sup>a</sup> "More developed" includes eastern Europe and temperate South America; "less developed" includes centrally planned Asia and South Africa.

of those characterizing the more developed areas in the early 1960's, but the rate of increase has been very much faster in the less developed areas and this has posed some major problems which will almost certainly continue to complicate the development process in the years ahead.

The townward movement of population is a normal concomitant of economic development: it is a consequence of rising productivity of the farmer and the opening up of employment opportunities in new industries and ancillary activities in more closely settled areas. In many developing countries, its speed reflects other influences, however, particularly lack of progress in the agricultural sector and the mounting pressure on rural workers—especially the young peasants and those with little prospect of acquiring land—of under-employment and deteriorating levels of living. The resultant townward movement, far from being a response to the call of new job openings, has often meant a drift into urban unemployment.

<sup>4</sup> "Less developed areas" in this context includes developing countries defined elsewhere in this report minus the temperate zone countries of South America plus South Africa and the centrally planned countries of Asia. For a discussion of the measurement problems connected with this estimate, see United Nations, "World demographic survey, urban and rural population, 1920-1980" (E/CN 9/209, 22 September 1967).

Given the rapid increase in total population, few developing countries have been able to industrialize at a pace sufficient to absorb both the expanding volume of urban school-leavers and the wave of transferees from agriculture. Thus many of the towns have become hosts to a steadily growing pool of unemployed persons.

The effort to contain the peri-urban shanty towns and prevent deterioration of urban health and living conditions has absorbed resources and tilted policies in ways that, on balance, could not but serve to slow down the over-all pace of economic development. Scarce capital has had to be devoted to the enlargement of urban infrastructure of low productivity relative to most other forms of investment. And price and wage policies have often been strongly influenced by the political pressure of the urban situation in ways that accentuated the imbalance between town and country and tended to stimulate rather than stem the drift from agriculture.

### *Agriculture*

The problems of agriculture in the developing countries are partly those of changing relationships brought about by the process of economic development and partly intrinsic to the sector itself. In both cases the picture of achievement is mixed and many of the difficulties are likely to be carried over into the 1970's as major items on the development agenda of most developing countries.

One aspect of the problem is sheer size: agriculture constitutes the largest single sector in most developing countries so that it is difficult to make progress in total production unless appropriate progress is made on the farms. In the early stages of economic development, agricultural productivity must rise fast enough to provide an increasing volume of savings and of manpower and commodities: the former will be invested in industry and other activities, the latter will provide the inputs of labour, food and raw materials required in these other sectors. And in the process the relative importance of agriculture will decline.

To some extent this has been happening. Agricultural production rose by just over 3 per cent a year in the ten years under review. This is a high rate of growth by earlier historical standards; and yet it was appreciably less than the rate of increase in the output of all goods and services, so that the relative contribution of agriculture dropped from almost 34 per cent of total gross domestic product in the mid-1950's to little more than 29 per cent in the mid-1960's (based on the thirty-nine countries for which the necessary national accounts data are available). But what might, in other circumstances, have been regarded as a satisfactory performance

proved inadequate in the light of actual population growth and development needs.

This is revealed most clearly in the case of food production. A number of developing countries—including some of the most populous—failed to maintain a rate of increase in food production equal to that of population (see table 15). As a result, do-

Table 15. Selected developing countries: growth in agricultural and food production,<sup>a</sup> 1955-1965

(Annual average percentage change)

Country <sup>b</sup>	Agricultural production	Food production	
		Total	Per capita
Israel	8.9	8.4	4.8
Syria	5.8	5.4	2.8
Republic of Korea	4.6	4.7	2.2
Libya	5.1	5.2	2.1
Tunisia	3.4	3.6	2.1
Mexico	4.6	5.2	2.0
Brazil	4.3	4.7	1.8
Ethiopia	3.4	3.1	1.5
West Malaysia	3.5	4.5	1.5
Honduras	4.7	4.3	1.3
Venezuela	4.5	4.7	1.3
China (Taiwan)	4.4	4.3	1.2
Burma	2.8	2.9	1.1
Thailand	4.1	3.7	0.9
United Arab Republic	3.5	3.3	0.9
Iran	3.6	3.1	0.8
Pakistan	2.8	3.1	0.8
Panama	3.6	3.6	0.8
Guatemala	6.3	3.5	0.6
Iraq	3.2	3.4	0.6
Morocco	2.5	2.7	0.5
Colombia	3.0	2.8	-0.2
Philippines	2.9	2.8	-0.3
Peru	2.5	2.3	-0.4
Argentina	1.1	1.0	-0.5
India	1.8	1.7	-0.5
Ceylon	2.1	1.7	-0.7
Chile	1.3	1.3	-0.8
Indonesia	1.0	1.0	-1.1
Uruguay	0.1	0.1	-1.2
Algeria	-0.1	0.1	-1.4

Source: Centre for Development Planning, Projections and Policies, based on Food and Agriculture Organization of the United Nations, *State of Food and Agriculture*.

<sup>a</sup> Based on index numbers, 1952-1956 = 100. Food production includes the following: grains, starchy roots, sugar, pulses, edible oil crops, nuts, fruits, vegetables, wine, cocoa, livestock and livestock products. Agricultural production also includes fibres, rubber, tea, coffee, tobacco and industrial oilseeds.

<sup>b</sup> Ranked in descending order of growth of *per capita* food production, 1955-1965.

mestic *per capita* supply, instead of rising in line with demand—allowing for the expansion in incomes as well as in population—began to lag seriously behind. This placed an additional strain on the price level and internal stability as well as on foreign exchange holdings and external stability.<sup>5</sup>

<sup>5</sup> These strains were alleviated in many cases by the provision of food aid by the United States and other countries in which agricultural capacity and production tended to run ahead of market demand. This aspect of the development problem is referred to in chapter V.

The reasons for this lag in food production differ from country to country (and some of them are discussed in chapter II). In the context of the summary of the nature and magnitude of the problems facing the developing countries being attempted in the present chapter, however, it is perhaps sufficient to indicate that the gains in productivity have not been high enough to support the development effort to the degree that over-all growth objectives made necessary. In the case of the crucial calorie sources, for example, not only did the developing countries start the period with average yields far below those reported in the more advanced countries but the rate of improvement in those yields also tended to trail behind (see table 16).

Recent events have opened up the possibility of a sharp upturn in cereal production. Genetic experiments have evolved varieties of hybrid maize and short-stemmed wheat and rice that have a much higher yield than traditional seeds and also lend themselves to more efficient methods of cultivation. Some successes have already been scored in terms of national output—most notably in Mexico but also in Kenya, Pakistan and Turkey—and promising local results have been obtained in places in India and the Philippines. How rapidly a technical breakthrough of this nature can contribute to a solution of the food problem—and to the more general problem of raising agricultural productivity in accordance with development needs—depends on a number of factors more properly discussed in chapter II where the role of tenure systems and price and credit policies is assessed. Here it is necessary to refer only to the implications for future investment that these genetic advances seem to involve.

Their full fruits cannot be reaped unless cultivation methods are appropriately adapted, all the necessary complementary inputs provided and adequate arrangements made for moving, storing and processing the output. To follow through on this may serve to weaken the rather artificial distinction that has often appeared between agriculture and industry. For a number of developing countries, the challenge immediately ahead is the integration of a more industrialized agriculture into the economy as a whole.

### Savings

In the light of the expanding investment needs of the developing countries—to provide employment opportunities and to support agriculture, for example—the low savings ratios that stem from low incomes are likely to continue to act as a major constraint on economic development. As in the case of so many other variables in the development picture, the record of the past period is a mixed one. Between the mid-1950's and the mid-1960's, most developing countries managed to raise their savings ratios;

Table 16. Cereals: area, yield and production, major country groupings, 1948-1965<sup>a</sup>

Country grouping and item	Area sown			Yield			Production		
	1948- 1952	1952- 1956 (Millions of hectares)	1961- 1965 (Millions of hectares)	1948- 1952 (Hundredths of kilograms per hectare)	1952- 1956 (Hundredths of kilograms per hectare)	1961- 1965 (Hundredths of kilograms per hectare)	1948- 1952 (Millions of tons)	1952- 1956 (Millions of tons)	1961- 1965 (Millions of tons)
<i>Developed market economies<sup>b</sup></i>									
Wheat .....	69.1	66.1	67.6	-0.2	12.5	14.1	16.6	2.2	112.2
Coarse grains .....	98.2	99.9	88.7	-0.8	18.0	18.8	25.4	2.7	225.2
Rice .....	4.1	4.3	4.3	0.5	39.5	41.3	49.0	1.7	21.3
<i>Centrally planned countries<sup>c</sup></i>									
Wheat .....	51.0	61.6	74.7	3.0	9.2	9.7	10.6	1.1	79.0
Coarse grains .....	74.2	79.0	71.7	-0.3	9.1	9.1	12.9	2.7	92.4
Rice .....	0.2	0.2	0.2	0.8	17.2	18.8	24.6	2.8	0.5
<i>Developing countries<sup>d</sup></i>									
Wheat .....	33.0	37.7	43.2	2.1	8.1	8.8	9.3	1.1	40.4
Coarse grains .....	104.2	115.2	131.5	1.8	5.9	7.0	8.0	2.3	105.2
Rice .....	71.8	76.1	88.3	1.6	13.1	14.1	16.4	1.8	145.2
<i>Latin America<sup>e</sup></i>									
Wheat .....	7.5	8.8	8.2	0.7	10.5	12.0	14.4	2.4	11.8
Coarse grains .....	17.8	21.1	27.2	3.3	7.0	10.6	12.1	4.3	32.9
Rice .....	2.7	3.3	5.2	5.3	17.0	16.2	16.9	-	8.9
<i>Near East<sup>f</sup></i>									
Wheat .....	4.4	5.5	7.4	4.2	7.7	7.6	7.1	-0.7	5.3
Coarse grains .....	2.6	3.0	3.5	2.3	8.5	9.1	8.3	-0.1	2.9
Rice .....	0.4	0.3	0.5	0.9	16.0	17.3	20.4	1.9	0.9
<i>Far East<sup>g</sup></i>									
Wheat .....	16.0	17.4	21.6	2.3	7.4	7.7	8.5	1.1	18.3
Coarse grains .....	47.9	53.1	56.0	1.2	5.0	5.5	6.4	2.0	35.9
Rice .....	65.9	69.6	79.5	1.5	13.0	14.0	16.4	1.8	130.0
<i>Africa<sup>h</sup></i>									
Wheat .....	5.1	6.1	6.0	1.2	7.3	8.0	8.3	1.0	5.0
Coarse grains .....	35.9	38.0	44.8	1.7	6.5	6.9	7.5	1.1	33.4
Rice .....	2.8	2.9	3.1	0.8	12.4	13.2	17.5	1.8	5.4

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on Food and Agriculture Organization of the United Nations, *Production Yearbook* (Rome), vol. 20.

<sup>a</sup> Totals, subtotals and annual percentages are based on unrounded data.

<sup>b</sup> United States, Canada, western Europe including Turkey and Cyprus, Australia, New Zealand, Japan and South Africa.

<sup>c</sup> Eastern Europe and USSR.

<sup>d</sup> Sum of Latin America, Near and Far East and Africa, as shown.

<sup>e</sup> Central and South America.

<sup>f</sup> Iran, Iraq, Israel, Jordan, Lebanon, Saudi Arabia, Syria and Yemen.

<sup>g</sup> Excluding mainland China and Japan, Near East as shown and Turkey and Cyprus.

<sup>h</sup> Continental Africa, excluding South Africa.

half of them, indeed, effected an increase of more than 3 per cent of gross domestic product. At the other end of the scale, however, there was a decline in the savings ratio in over a fourth of the developing countries; together these countries accounted for over half of the population of the developing world (see table 17).

Table 17. Developing countries: distribution by change in ratio of gross domestic savings to gross domestic product, 1955-1957 to 1963-1965

Change in savings ratio (percentage points)	Countries <sup>a</sup>		Gross domestic product (Percentage, 1965)	
	Number	Percentage	Product	Population
9.0 and over	11	17	9	7
6.0-8.9	10	16	10	10
3.0-5.9	11	17	19	8
0.0-2.9	13	21	23	22
-2.9-0.1	11	17	37	49
-3.0 and under	7	10	2	4
Total	63	100	100	100

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Yearbook of National Accounts Statistics*, and national sources.

<sup>a</sup> Countries in each category are as follows (in descending order of change in ratio of real gross domestic savings to gross domestic product): 9.0 percentage points and over: Syria, Togo, Saudi Arabia, Libya, Jordan, China (Taiwan), Algeria, Lebanon, Iran, Ghana, Kenya; 6.0-8.9: Republic of Korea, Philippines, Ethiopia, Cameroon, Nicaragua, Tunisia, Haiti, former French West Africa, Trinidad and Tobago, former French Equatorial Africa; 3.0-5.9: Sierra Leone, Venezuela, Uganda, Jamaica, United Arab Republic, former Federation of Rhodesia and Nyasaland, Argentina, Angola, Costa Rica, Mozambique, Israel; 0.0-2.9: Thailand, Pakistan, Paraguay, Iraq, Liberia, El Salvador, Sudan, Ceylon, Chile, Guatemala, Uruguay, Nigeria, Mexico; -2.9-0.1: Honduras, Panama, Kuwait, India, Madagascar, Brazil, Morocco, Ecuador, Colombia, Peru, Bolivia; -3.0 and under: United Republic of Tanzania, Guyana, Mauritius, Burma, Democratic Republic of the Congo, Barbados, Dominican Republic.

Thus, though savings increased more rapidly in the developing countries than in the developed market economies during this period—by about 6 per cent a year as against 4.5 per cent—the average developing-country savings ratio ended up still over a third lower: in 1965, it was about 14 per cent of gross domestic product in the developing countries compared with 22 per cent in the developed market economies. Well over half of the developing countries had savings ratios of less than 15 per cent and as some of the large economies were in this group, it accounted for three-fourths of the total population (see table 18).

In absolute terms, Latin American countries predominated among those with gross domestic savings of over \$50 *per capita* in 1965: Argentina, Chile, Mexico, Nicaragua, Panama, Uruguay and Venezuela were all in this category. At the other end of the scale, with savings of less than \$12 *per capita*, were the poorer countries of Africa and Asia, including India, Pakistan and Nigeria.

Table 18. Developing countries: distribution by ratio of real gross domestic savings to gross domestic product, 1963-1965

Gross domestic savings ratio <sup>a</sup> (percentage)	Countries <sup>b</sup>		Gross domestic product (Percentage, 1965)	
	Number	Percentage	Product	Population
25.0 and over	5	9	8	2
20.0-24.9	7	11	3	2
15.0-19.9	16	25	32	22
10.0-14.9	20	32	42	59
Under 10.0	15	24	14	15
Total	63	100	100	100

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Yearbook of National Accounts Statistics*.

<sup>a</sup> Gross domestic savings is defined as gross domestic product less consumption plus net factor income from abroad.

<sup>b</sup> Countries in each category are as follows (in descending order of ratio of real gross domestic savings to gross domestic product: 25.0 per cent and over: Kuwait, Libya, Saudi Arabia, Venezuela, Angola; 20.0-24.9 per cent: Togo, Ghana, Liberia, Mozambique, Mauritius, Trinidad and Tobago, Algeria; 15.0-19.9 per cent: Argentina, former Federation of Rhodesia and Nyasaland, Thailand, Uganda, China (Taiwan), Burma, Iran, Syria, Jamaica, Iraq, Lebanon, Cameroon, Peru, Ceylon, Colombia, Brazil; 10.0-14.9 per cent: former French Equatorial Africa, Nicaragua, Philippines, Israel, Paraguay, United Republic of Tanzania, United Arab Republic, Uruguay, Morocco, Guyana, Democratic Republic of the Congo, Mexico, Ecuador, Kenya, India, El Salvador, Sudan, Nigeria, Tunisia, Ethiopia; under 10.0 per cent: Chile, Guatemala, Honduras, Pakistan, Republic of Korea, Haiti, Costa Rica, Bolivia, Dominican Republic, Madagascar, former French West Africa, Sierra Leone, Barbados, Panama, Jordan.

Throughout the period under review, the domestic savings of the developing countries have been supplemented by an inflow of resources from abroad. This inflow has increased more slowly than local production and local savings—at least in the aggregate—so that its relative contribution to capital formation declined from almost 3 per cent of the combined gross domestic product of the developing countries in the mid-1950's to about half that proportion in the mid-1960's. The decline in the relative contribution of external resources was far from uniformly distributed among the developing countries. As pointed out in the analysis of trends earlier in this chapter, the over-all figure was strongly influenced by inflows of private capital into the mining sectors of a number of countries in the 1950's. There was no comparable inflow in the first half of the 1960's. Thus whether the high investment ratios of the mid-1950's were further increased by the mid-1960's (as in Liberia and Libya) or receded to nearer the developing-country average (as in Algeria, Jamaica, Peru, Trinidad and Tobago and Venezuela) or were even below the developing-country average (as in Iraq and the former Federation of Rhodesia and Nyasaland) the proportion contributed by domestic savings was generally higher.

The combined investment ratio of the developing countries rose by just under 1 per cent of gross production between the mid-1950's and the mid-1960's. This gain was less than that achieved by the developed market economies so that, at 22 per cent in the latter and rather less than 16 per cent in the developing countries, the difference was somewhat greater in 1965 than it was ten years earlier. There were more countries registering significant reductions in their investment ratios between the mid-1950's and the mid-1960's than there were with significant increases. The former were generally smaller, however, accounting for only about a fifth of the population of the developing world while the latter accounted for over a fourth (see table 19).

**Table 19. Distribution of developing countries by change in ratio of real gross investment to gross domestic product, 1955-1957 to 1963-1965**

Change in investment ratio (percentage points)	Countries <sup>a</sup>		Gross domestic product (Percentage, 1965)	Population
	Number	Percentage		
5.0 and over	10	16	13	16
3.0 to 4.9	4	6	3	4
1.0 to 2.9	11	17	18	9
-0.9 to 0.9	12	19	36	50
-2.9 to -1.0	9	14	15	11
-4.9 to -3.0	5	8	2	1
-5.0 and under	12	19	14	9
Total	63	100	100	100

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on data from the Statistical Office of the United Nations and national sources.

<sup>a</sup> Countries in each category are as follows (in descending order of change in investment ratio to gross domestic product, 1955-1957 to 1963-1965): 5.0 percentage points and over: Togo, Tunisia, Liberia, Pakistan, China (Taiwan), Ethiopia, Ghana, Thailand, Iran, Panama; 3.0 to 4.9: Lebanon, former French West Africa, Sudan, Jordan; 1.0 to 2.9: Mauritius, Mozambique, Republic of Korea, Kuwait, Paraguay, Chile, El Salvador, Nicaragua, Philippines, Bolivia, Argentina; -0.9 to 0.9: Nigeria, Libya, Morocco, Sierra Leone, India, Syria, United Arab Republic, Israel, Angola, Cameroon, Mexico, Honduras; -2.9 to -1.0: Haiti, Madagascar, Brazil, Ecuador, Burma, Ceylon, Dominican Republic, Saudi Arabia, Guyana; -4.9 to -3.0: Guatemala, Trinidad and Tobago, Uruguay, Costa Rica, Uganda; -5.0 and under: Barbados, Peru, Jamaica, former French Equatorial Africa, Algeria, Colombia, United Republic of Tanzania, Iraq, Venezuela, Kenya, Democratic Republic of the Congo, former Federation of Rhodesia and Nyasaland

While exceptional and often exogenous factors were responsible for some of the larger movements in the ratio of capital formation to gross domestic product—notably the fluctuations in foreign direct investment referred to above and the outflow of capital from certain areas in the wake of political shifts—some undoubtedly reflect more deeply seated changes in the country's capacity to grow. This applies both to the lagging countries, such as Burma,

Ceylon, Colombia, Guyana, Iraq, Uganda and Uruguay, and to some among those that achieved sizable gains in their investment ratios—China (Taiwan), Ethiopia, Iran, Pakistan, Republic of Korea, Thailand and Tunisia, for example. A similar significance attaches to the lack of change in the investment performance of the large middle block of countries, among which were a number with static below-average investment ratios—Cameroon, India, Morocco, Nigeria and Syria, for example.

Thus the most disturbing aspect of the investment picture is the size of the low-performance group. Only an eighth of the population of the developing world lives in countries with mid-1960's investment ratios of 17 per cent or more, while almost 60 per cent live in countries with ratios of less than 14 per cent (see table 20). The hard-core problem of low income-low savings-low investment-low growth is not a matter of peripheral pockets of underdevelopment (though these exist, too) but one that affects principally the great population concentrations.

The link between investment and output is by no means a simple one, especially in developing countries where the capital base is often narrow and fragmented, a single investment may make a large difference to capacity, and production may be greatly affected by exogenous forces such as the weather

**Table 20. Distribution of developing countries by ratio of real gross investment to gross domestic product, average 1963-1965**

Average investment ratio (percentage)	Countries <sup>a</sup>		Gross domestic product (Percentage, 1965)	Population
	Number	Percentage		
23.0 and over	7	11	5	2
20.0 to 22.9	6	10	5	4
17.0 to 19.9	11	17	16	7
14.0 to 16.9	17	27	37	28
11.0 to 13.9	18	29	35	57
Under 11.0	4	6	2	2
Total	63	100	100	100

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on data from the Statistical Office of the United Nations and national sources.

<sup>a</sup> Countries in each category are as follows (in descending order of average investment ratio to gross domestic product, 1963-1965): 23.0 per cent and over: Libya, Mozambique, Liberia, Israel, Angola, Ghana, Tunisia; 20.0 to 22.9 per cent: Trinidad and Tobago, Barbados, Peru, Thailand, China (Taiwan), Togo; 17.0 to 19.9 per cent: Lebanon, Panama, Dominican Republic, Nicaragua, Burma, Argentina, Venezuela, Guyana, Bolivia, Colombia, Jamaica; 14.0 to 16.9 per cent: Iran, Costa Rica, Republic of Korea, Pakistan, Jordan, Mauritius, Paraguay, Mexico, United Arab Republic, Algeria, Honduras, former French Equatorial Africa, Brazil, Uruguay, former Federation of Rhodesia and Nyasaland, Syria, Kuwait; 11.0 to 13.9 per cent: India, Ecuador, Sudan, El Salvador, Nigeria, Sierra Leone, Ceylon, Chile, Democratic Republic of the Congo, Uganda, Iraq, Guatemala, United Republic of Tanzania, Morocco, Ethiopia, Philippines, Cameroon; under 11.0 per cent: former French West Africa, Kenya, Madagascar, Saudi Arabia, Haiti

and the state of the world market for a particular commodity. But over the long haul, the rate of growth in output is heavily dependent on the rate of capital formation. On average, over the period under review, it has taken a rate of increase of between 3 and 4 per cent in investment to yield an increase of 1 per cent in total output. In the mid-1960's rather more than half of the developing countries had investment ratios above the 15 per cent that would in these circumstances be required to attain a rate of growth in output of 5 per cent a year. But these countries accounted for only a third of the population of the developing world. However, the range of performance in respect of this measure of the efficiency with which capital is used, as with so many other features of recent economic development, has been a wide one (see table 21).

**Table 21. Developing countries: distribution by incremental capital-output ratio,<sup>a</sup> average 1955-1965**

Capital-output ratio	Countries <sup>b</sup>		Gross domestic product (Percentage, 1965)	Population
	Number	Percentage		
Under 2.0	5	8	4	2
2.0 to 2.9	15	24	25	16
3.0 to 3.9	19	30	34	31
4.0 to 4.9	11	17	24	43
5.0 to 5.9	7	11	5	4
6.0 and over	6	10	9	5
Total	63	100	100	100

Source: See table 2.

<sup>a</sup> Ratio calculated as the quotient of the average real investment ratio and average annual rate of growth of gross domestic product, 1955 to 1965.

<sup>b</sup> Countries in each category are as follows (in ascending order of capital-output ratio): *under 2.0*: Democratic Republic of the Congo, Saudi Arabia, Jordan, Kuwait, Libya; *2.0 to 2.9*: Sierra Leone, Philippines, Guatemala, Ethiopia, El Salvador, Republic of Korea, China (Taiwan), Syria, Mexico, Liberia, Panama, Iran, Cameroon, Chile, Iraq; *3.0 to 3.9*: Pakistan, former French West Africa, Nigeria, United Arab Republic, Thailand, Israel, Honduras, Morocco, Sudan, Nicaragua, Brazil, Ecuador, Jamaica, Tunisia, Trinidad and Tobago, Togo, Uganda, Venezuela, Costa Rica; *4.0 to 4.9*: India, Dominican Republic, former French Equatorial Africa, United Republic of Tanzania, Kenya, Peru, Angola, former Federation of Rhodesia and Nyasaland, Haiti, Lebanon, Ceylon; *5.0 to 5.9*: Ghana, Paraguay, Colombia, Algeria, Mauritius, Mozambique, Barbados; *6.0 and over*: Madagascar, Burma, Argentina, Bolivia, Guyana, Uruguay.

A closer examination of individual cases—especially the countries that have run into difficulties in servicing their external debt in recent years—suggests that it might be wiser to take the magnitude of the capital-output ratio into development strategy as a policy variable rather than as a fixed parameter. On purely *a priori* grounds, this would also appear to be the sounder course: it will continue to be extremely difficult to raise savings ratios in poor countries, capital will continue to be one of the major constraints on development, hence every effort will have to be made to formulate investment patterns

and priorities as productively as possible in the circumstances of the country concerned.

The importance of investment for the purpose of accelerating economic growth and the difficulty of raising savings ratios in low-income countries together constitute the main justification for development aid. Only by a simultaneous increase of domestic savings and the inflow of external resources will most developing countries be able to lift their investment ratios to the extent necessary to ensure a satisfactory rate of growth in total production. The need is not only for a larger volume. The aid policies of donor countries can do much to raise the efficiency of investment: in many developing countries, the inflow of aid is a major determinant of the direction of domestic investment. If it is to help loosen the stringency of the savings constraint, aid will have to be deployed with particular attention to its contribution to improving the over-all efficiency with which capital is utilized.

### Foreign exchange

In the light of the strategic importance of exports and their proceeds to the economic development process, as pointed out earlier in the present chapter, it is germane to note first that, by at least one measure, export dependence has tended to increase during the period under review. Between the mid-1950's and the mid-1960's the proportion of developing countries in which the ratio of export earnings from goods and services to total production of goods and services was less than 20 per cent declined from almost one-half to not much more than one-third, while that of countries in which that ratio was over 30 per cent rose from about a fourth to a third (see table 22).

This increase in export dependence adds significance to the relatively slow growth in the total proceeds of commodity exports in this period. During the second half of the 1950's this was a mere 2.5 per cent a year; it accelerated to 6.4 per cent in the first half of the 1960's and over the ten years averaged 4.5 per cent a year. About a third of the developing countries registered rates of increase in excess of 6 per cent; but almost a half had rates of less than 4 per cent a year and these included some of the largest countries, accounting altogether for almost three-fourths of the population of the developing world (see table 23).

The average rate of growth of developing-country trade was appreciably lower than that of the developed market economies and the centrally planned economies. Thus the developing countries lost a good deal of ground in total world trade: they accounted for about a fourth of all exports in the mid-1950's but for less than a fifth by the mid-1960's. There

**Table 22. Developing countries: distribution according to ratio of exports of goods and services to gross domestic product, 1955-1957 and 1963-1965**

Ratio of exports to gross domestic product (percentage)	1955-1957		1963-1965	
	Number of countries	Percentage	Number of countries <sup>a</sup>	Percentage
Under 10	7	11	4	6
10 to 19	24	38	20	31
20 to 29	18	28	18	28
30 to 39	7	11	9	14
40 to 49	3	5	6	9
50 and over	5	8	7	11
Total	64	100	64	100

Source: See table 2.

<sup>a</sup> Countries in each category are as follows (in ascending order of average exports of goods and services ratio to gross domestic product, 1963-1965: *under 10 per cent*: India, Brazil, Republic of Korea, Pakistan; *10 to 19 per cent*: Mexico, Argentina, Chile, Mozambique, Burma, Colombia, Ethiopia, Jordan, Israel, Madagascar, Uruguay, Guatemala, China (Taiwan), Haiti, Ecuador, Bolivia, former French West Africa, Tunisia, United Arab Republic, Dominican Republic; *20 to 29 per cent*: Syria, Nigeria, Paraguay, Thailand, Sudan, Honduras, Iran, Morocco, Philippines, Costa Rica, Peru, former French Equatorial Africa, Angola, El Salvador, Cameroon, Democratic Republic of the Congo, Ceylon, Ghana; *30 to 39 per cent*: Panama, Nicaragua, Sierra Leone, Algeria, Republic of Tanzania, Togo, Uganda, Venezuela, Jamaica; *40 to 49 per cent*: Kenya, Malaysia, (1962-1964), Lebanon, Iraq, former Federation of Rhodesia and Nyasaland, Mauritius; *50 per cent and over*: Barbados, Liberia, Guyana, Saudi Arabia, Libya, Kuwait, Trinidad and Tobago.

**Table 23. Distribution of developing countries by rate of growth of export values, 1955-1965**

Annual average growth of export value (percentage)	Countries <sup>a</sup>		Exports (Percentage, 1965)	Population
	Number	Percentage		
8.0 and over	13	18	17	8
6.0 to 7.9	12	17	17	10
4.0 to 5.9	12	17	16	9
2.0 to 3.9	14	20	33	58
Under 2.0	20	28	17	15
Total	71	100	100	100

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on International Monetary Fund, *International Financial Statistics* (Washington, D. C.).

<sup>a</sup> Countries in each category are as follows (in descending order of increase in exports, 1955-1965): *8.0 per cent and over*: Libya, Republic of Korea, Israel, China (Taiwan), Iran, Jordan, Liberia, Sierra Leone, Hong Kong, Lebanon, Trinidad and Tobago, Peru, Honduras; *6.0 to 7.9 per cent*: Jamaica, Cambodia, Surinam, Panama, Angola, Mozambique, Nigeria, Saudi Arabia, former Federation of Rhodesia and Nyasaland, Nicaragua, Kuwait, Philippines; *4.0 to 5.9 per cent*: Kenya, Thailand, Guyana, El Salvador, Guatemala, Ethiopia, United Republic of Tanzania, Iraq, Paraguay, Argentina, Martinique, Barbados; *2.0 to 3.9*: Mexico, Venezuela, Uganda, Bolivia, Chile, United Arab Republic, Costa Rica, Pakistan, India, Algeria, Morocco, Malaysia, Sudan, Cameroon; *under 2.0 per cent*: Mauritius, Ghana, Madagascar, Syria, Uruguay, Brazil, Guadeloupe, Dominican Republic, Tunisia, Aden, Réunion, Haiti, Ceylon, Laos, Burma, Colombia, Singapore, Netherlands Antilles, Brunei, Republic of Viet-Nam.

are many causes for this lag—and some of them are discussed in chapter III—but the basic factor was, and continues to be, the composition of developing-country exports, heavily weighted as it has been by primary commodities.

In the mid-1950's, over 60 per cent of developing-country exports consisted of food-stuffs and raw materials. As the value of these exports increased by less than 3 per cent and 2 per cent a year, respectively, their share of total developing-country exports had declined to about 50 per cent by the mid-1960's—compared with 28 per cent in the case of the exports of the centrally planned economies and 24 per cent in the case of the developed market economies. Even within the primary-commodity category, the developing countries produced and shipped relatively more of the slow-growing items: the value of food and raw materials exports from the more advanced countries rose at about 7 per cent and 4 per cent, respectively (see table 24).

This is in part a reflection of the fact that many of the items exported by developing countries face a demand that is relatively unresponsive to increase in income and declines in price. Augmented by concessional sales,<sup>6</sup> the quantum of exports of food-stuffs and raw materials from the developed market economies rose by about 75 per cent between the mid-1950's and the mid-1960's; in the case of the developing countries, the increase was only 25 per cent. It also reflects the fact that, in the face of this inelastic demand, the competition of expanding output tended to force prices down. Thus, while the unit value of food-stuffs as a whole was higher in the mid-1960's than in the mid-1950's, the prices of many of the major items exported by the developing countries—notably coffee, cocoa, tea and sugar—were all appreciably lower.<sup>7</sup> Wool, cotton and rubber prices were also significantly lower at the end of the period than at the beginning. Thus, while the average unit value of developing-country primary-commodity exports in the mid-1960's was marginally higher than at the beginning of the decade, it was about 11 per cent below the level of the mid-1950's (see table 25).

Of the major categories of exports from the developing countries, by far the most rapidly rising was petroleum. Earnings from this item increased at almost 7 per cent a year, and its contribution to

<sup>6</sup> The proportion of developed market economy exports in the form of sales under United States government programmes did not change radically during the period under review. In terms of current values, these concessional sales accounted for between 7 and 10 per cent in the case of food-stuffs and between 2 and 4 per cent in the case of raw materials.

<sup>7</sup> In the case of the beverage crops the mid-1950's marked the peak of post-war prices, before the effect of new plantings was felt on the market. The demand side of this problem and the question of how adjustments might be made are discussed in chapter V.

Table 24. Exports of major regions, 1955-1966<sup>a</sup>

Country group <sup>b</sup> and period	SITC sections						
	Total (0 to 9)	Food (0 and 1)	Raw materials (2 and 4)	Fuels (3)	Chemicals (5)	Machinery (7)	Other manufactures (6 and 8)
(Billions of dollars, 1965-1966)							
Developing countries	38	10	8	12	1	—	6
Developed countries	135	18	14	4	11	42	42
Centrally planned countries	22	3	3	2	1	6	6
(Percentage of total world exports)							
<i>Developing countries</i>							
1955-1956	25	41	39	57	5	1	11
1960-1961	21	35	35	60	4	1	10
1965-1966	19	33	33	64	4	1	11
<i>Developed countries</i>							
1955-1956	65	51	50	33	88	87	80
1960-1961	67	54	53	26	87	86	78
1965-1966	69	58	55	24	87	86	78
<i>Centrally planned countries</i>							
1955-1956	10	8	11	11	7	12	9
1960-1961	12	10	11	13	9	13	12
1965-1966	12	10	12	12	9	13	12
(Percentage of group's total exports)							
<i>Developing countries</i>							
1955-1956	100	32	29	25	1	1	12
1960-1961	100	29	27	29	1	1	12
1965-1966	100	28	22	31	1	1	16
<i>Developed countries</i>							
1955-1956	100	15	14	6	7	25	32
1960-1961	100	14	13	4	8	28	31
1965-1966	100	14	10	3	8	31	31
<i>Centrally planned countries</i>							
1955-1956	100	16	21	12	4	22	24
1960-1961	100	15	16	11	5	24	28
1965-1966	100	14	14	10	5	27	28
(Annual rate of change, percentage)							
<i>Developing countries</i>							
1955-1956 to 1960-1961	2.5	0.5	1.4	5.0	5.6	9.9	4.1
1960-1961 to 1965-1966	6.4	5.2	2.3	8.4	11.6	16.4	11.4
1955-1956 to 1965-1966	4.5	2.9	1.9	6.7	8.5	13.1	7.7
<i>Developed countries</i>							
1955-1956 to 1960-1961	6.4	5.0	4.7	-0.7	9.0	9.3	6.2
1960-1961 to 1965-1966	9.0	8.2	4.3	5.2	10.9	10.9	8.8
1955-1956 to 1965-1966	7.7	6.6	4.5	2.2	9.9	10.1	7.5
<i>Centrally planned countries</i>							
1955-1956 to 1960-1961	9.6	9.0	3.2	8.2	14.6	11.5	12.6
1960-1961 to 1965-1966	7.8	5.3	4.9	5.9	9.6	10.3	8.0
1955-1956 to 1965-1966	8.7	7.2	4.1	7.0	12.0	10.9	10.3

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Monthly Bulletin of Statistics*.

<sup>a</sup> Based on data in current dollars.

<sup>b</sup> Developed country group comprises United States,

Canada, western Europe, Australia, New Zealand, South Africa, Japan; centrally planned country group comprises USSR, other eastern Europe, mainland China, Mongolia, North Korea, North Viet-Nam; developing country group comprises the rest of the world.

total export earnings rose from about 25 per cent in the mid-1950's to 30 per cent in the mid-1960's. Exports of manufactured goods—the dynamic element in the trade of the more advanced countries—rose more rapidly but, even at the end of the period, contributed not much more than a sixth of total developing-country proceeds. The major components of the category of manufactures were non-ferrous

base metals and textiles (cloth and clothing). In terms of quantum, the share of the former declined from almost half to about a third while that of the latter rose from a fifth to over a fourth. This implies a certain amount of diversification though the scale remained small and a few items—such as chemicals from new petroleum refineries, cut diamonds from Israel, various items of hardware from Hong Kong

Table 25. Selected export price and quantum indices, 1954-1966

(Average 1954-1956 = 100)

Item	Average			
	1959-1961		1964-1966	
	Developed areas	Developing areas	Developed areas	Developing areas
<i>Export prices</i>				
Primary commodities:				
Total	94	88	103	89
Food	97	77	111	85
Agricultural raw materials	90	96	95	88
Minerals	93	97	101	99
Non-ferrous base metals <sup>a</sup>	86	74	112	113
<i>Export quantum<sup>b</sup></i>				
Total	135	121	196	160
Food <sup>c</sup>	137	114	179	132
Raw materials <sup>d</sup>	137	106	170	118
Manufactures <sup>e</sup>	131	137	195	210

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Yearbook of International Trade Statistics* and United Nations, *Monthly Bulletin of Statistics*.

<sup>a</sup> Based on 1956 = 100.

<sup>b</sup> Based on exports to world excluding centrally planned economies.

<sup>c</sup> SITC 0 and 1.

<sup>d</sup> SITC 2 and 4.

<sup>e</sup> SITC 6 and 8 for developed areas and SITC 5, 6, 7 and 8 for developing areas.

and plywood and veneers from several tropical countries as well as from the Republic of Korea—tended to predominate. Some countries—notably China (Taiwan), Jamaica, Philippines and Thailand—managed to expand their exports of preserved and processed fruit and vegetables; this helped considerably in maintaining their own export unit values but the amounts were relatively small when subsumed in the general category of food exports.

Some developing countries managed to diversify their exports during this period or at least to reduce their dependence on a single item: Brazil (coffee), China (Taiwan) (sugar), Honduras and Panama (bananas), Mexico (cotton and coffee), Nigeria (cocoa and oilseeds), Pakistan (jute and cotton), Peru (cotton and sugar), Republic of Korea (rice), Thailand (rice and rubber), United Arab Republic (cotton). All had somewhat better balanced exports at the end of the period than at the beginning, though in some cases this was achieved more or less involuntarily through a decline in the price of the leading product. In contrast to this tendency, however, there were also countries whose major export became even more predominant as a result of development during the period. This was the case in respect of petroleum in Iran, Libya and Trinidad and Tobago, iron ore in Liberia, tin in Bolivia and textiles in Hong Kong.

There was also some tendency for developing-country exports to diversify geographically: the proportion of individual country exports going to their three principal markets declined in far more instances than it rose. This reflects in part the weakening of traditional commercial links with former metropolitan countries and in part the rela-

tively rapid expansion in demand in such countries as Japan and some of the members of the European Economic Community and, in a few cases, the growth of trade with the Soviet Union or with other developing countries.

These changes have not yet gone very far, however, and the most basic features that characterized the trade of the developing countries in the mid-1950's still persist. The predominance of primary commodities in their exports seems likely to continue to act as a brake on the growth of foreign exchange earnings. Local markets are often too small to sustain rapid industrialization and the difficulties of expanding manufactured exports to the more advanced countries remain very formidable. Yet subregional integration has made little headway and trade among the developing countries has in general been among the least dynamic of the flows (see table 26).

The failure of the preponderant element of food and raw materials in developing countries' exports to provide the expansion in import capacity required to support their development efforts turned many of the developing countries towards external borrowing. The spread and intensification of borrowing began in the mid-1950's when the foreign currency reserves accumulated by many developing countries during the Second World War and the Korean conflict were being rapidly drawn down. By the end of 1966, the external public debt of the sixty-three developing countries for which data are available had reached about \$33 billion.<sup>8</sup>

<sup>8</sup> These figures exclude private indebtedness not guaranteed by the Governments concerned. The total also excludes a number of countries—such as Indonesia and United Arab Republic—for which the available data are not adequate.

Table 26. Developing countries: growth of exports to principal regions, 1955-1965<sup>a</sup>  
(Percentage)

Exporting region	Rate of increase in exports to <sup>b</sup>		
	Developed market economies	Centrally planned economies	Developing countries
Developing countries, total	4.4	15.2	2.8
Latin America	2.6	17.3	3.2
Africa	5.3	15.1	5.0
West Asia	8.2	15.8	6.1
Southern and south-eastern Asia	3.3	12.9	1.5

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on *Yearbook of International Trade Statistics, 1965* (United Nations publication, Sales No.: 67.XVII.2).

<sup>a</sup> Based on data in current dollars; growth rate is compound rate between 1955 and 1965.

<sup>b</sup> Developed market economies: United States, Canada, western Europe, Australia, New Zealand, South Africa, Japan; centrally planned economies: USSR, other eastern Europe, mainland China, Mongolia, North Korea, North Viet-Nam; developing countries: regions other than developed market economies and centrally planned economies.

The reason that first impelled borrowing has now tended to make the consequences of borrowing increasingly uncomfortable. Though the pace of export earning did pick up in the first half of the 1960's, the need for development-sustaining imports has not slackened and the burden of interest and amortization has for most developing-country borrowers grown steadily heavier. In 1956, service payments on official external debt absorbed 5 per cent or more of export earnings in about one-third of the borrowing countries for which data are available. By 1960, over half of the countries were in this position and in one-fifth, service payments absorbed more than 10 per cent of exports earnings. By 1965, an eighth of these countries were paying out more than 15 per cent of their export earnings

in debt service and the proportion paying out 5 per cent or more had risen to three-fourths (see table 27). In 1966, the service payments of the sixty-three developing countries for which data have been reported amounted to rather more than \$3.1 billion or 11 per cent of that year's export earnings of the countries concerned. Just over two-thirds of this outflow was for amortization and somewhat less than one-third for interest.

Given the disappointing progress in restructuring exports and the slow advance towards a more rational division of labour among the developing countries on the basis of which intra-trade can begin to accelerate, this rise in the debt-service burden has greatly increased the constraining effects on development of foreign exchange availabilities.

Table 27. Selected developing countries: distribution by incidence of debt-service payments, 1956, 1960, 1965

Ratio of service payments to exports (percentage)	1956		1960		1965	
	Number of countries	Percentage	Number of countries	Percentage	Number of countries <sup>a</sup>	Percentage
Under 5	17	65	14	47	8	27
5-9	8	31	10	33	14	47
10-14	1	4	3	10	4	13
15 and over	—	—	3	10	4	13
Total	26	100	30	100	30	100

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on International Bank for Reconstruction and Development, *External Medium and Long-Term Public Debt—Past and Projected Amounts Outstanding, Transactions and Payments, 1956-1967* (Washington, D.C.); International Monetary Fund, *International Financial Statistics*.

<sup>a</sup> Countries in each category are as follows (in ascending order of ratio of service pay-

ments to exports, 1965): under 5 per cent: Venezuela, Ceylon, Honduras, China (Taiwan), Morocco, Nigeria, Thailand, El Salvador; 5-9 per cent: Guyana, Nicaragua, Guatemala, Tanganyika, Uganda, Ethiopia, Ecuador, Sudan, Iran, former Federation of Rhodesia and Nyasaland, Philippines, Panama, Paraguay, Peru; 10-14 per cent: Costa Rica, Uruguay, Pakistan, Kenya; 15 per cent and over: India, Colombia, Chile, Mexico.

## Chapter II

### PRODUCTION AND PRODUCTIVITY: POLICY PROBLEMS

The statistical assessment of chapter I led to the conclusion that the developing countries face three main types of constraint on their economic development—the productivity of their populations, their capacity to generate savings and their ability to obtain external purchasing power. The policies that have been adopted to overcome these constraints are discussed in chapter III. The choice of policy and the prospects for implementing it are largely determined by the productive structure of the economy, however, so it is desirable first to examine the ways in which resources are in fact utilized in the developing countries.

Partly because of the nature of the available data this task is approached through the conventional forms of economic activity—agriculture, mining, manufacturing, construction and so on—which reveal the industrial origin of the country's gross product. As this breakdown of activity is rather artificial, however, and as the problems that developing countries have to solve lie partly in the borderland between sectors, in the relationships between sectors and in the joint contribution of sectors to the supply of exportable goods, the analysis often requires a re-emphasis of the functional problems and a blurring of the traditional divisions.<sup>1</sup>

This epitomizes one of the difficulties that many of the developing countries still face in formulating and implementing a development strategy. For the old and often politically powerful ministries and departments are often divided along sectoral lines, and the resultant stress on plans for agricultural development, industrial development, transport development and so on does not always yield the policy mix best calculated to facilitate the attainment of more general national economic goals with maximum efficiency. Nevertheless, there are problems inherent in agriculture and in each of the other sectors that are special or even unique and must be tackled by technical or institutional remedies at the sectoral level. Moreover, in mapping its development strategy, a Government has always to start from the situation that exists, including the size and organization of each of the sectors.

<sup>1</sup> This, of course, is why the essentially intersectoral function of economic planning is so important to the development process.

In most developing countries this means an agricultural sector that is relatively large by employment standards—very often the largest by far—but much smaller in terms of its net contribution to total output. It also means a small manufacturing sector—by both employment and value added standards—but one that in most cases is expanding rapidly in comparison with other developing-country growth rates. In some developing countries there is also a mining sector, often largely in foreign hands, small in its employment but often crucially important in terms of its contribution to exports. There is also a sector dealing with trade and financial matters that tends to grow in size in parallel with those producing commodities and sometimes somewhat faster.

The organization of the agricultural sector differs considerably from country to country—depending on the nature of the crop, on the relative size of its commercial component and its involvement in export activities as well as on its institutional and topographical features—but in most developing countries Governments engage in research and extension work, in price administration and stabilization, in the provision of credit and other financing and, in varying degree, in the physical handling of off-farm supplies. In most developing countries, the manufacturing sector is in private hands, but many Governments participate in particular industries and more generally they tend to have wide responsibility for the provision and maintenance of the economy's infrastructure of power, water, ports, transport and means of communication.

The basic problem facing most Governments is to raise productivity in agriculture (and by the same token in fishing and forestry and mining—the other so-called primary activities) so as simultaneously to release manpower, to expand the flow of food-stuffs and raw materials for export and for inputs into local manufacturing plants and to help generate a surplus of earnings over expenditure on consumption that can be channelled into capital formation. This cannot be achieved by indiscriminate expansion. The growth that is required must be determined largely by market considerations, that is, it must be geared to the changing pattern of demand both on world markets and among domestic consumers as occupations, location, incomes and tastes alter.

Experience has shown not only that there are many impediments in the way of raising agricultural productivity but also that the absorption of workers into appropriate secondary industries is often an extremely complicated process. Difficulties on the supply side (particularly shortages of entrepreneurial ability, technical skills and capital) accentuate those on the demand side, notably the limitations of the local market and the problem of holding costs down to internationally acceptable levels in the face of the narrowing of technological choices imposed by the pattern of local resource availabilities.

In guiding the private sector to meet these two sets of problems, the Government has not only to deploy a mutually consistent mix of policy instruments but has also to support the process by its own infrastructure investment. As large blocks of scarce capital are often involved and as the resultant services—especially power and transport—are often crucial to the success of the efforts to raise agricultural productivity and accelerate industrialization, intricate timing questions tend to be involved.

Though the precise nature and sequence of these problems differ appreciably from case to case, the questions that have to be faced are quite common and, indeed, in some degree inescapable in the economic development process. An examination of the experience of some of the developing countries in coping with them in recent years may thus be of general interest.

#### PROBLEMS AND POLICIES OF AGRICULTURAL DEVELOPMENT

In some ways the progress made by the developing countries in recent years has conformed to the requirements of the economic development process. Between the mid-1950's and the mid-1960's, agricultural production increased at rather more than 3 per cent a year—a rate that is probably well above the historical average. Other sectors increased their output appreciably faster; in particular, manufacturing production rose at about 5.4 per cent a year.<sup>2</sup> As a result, the relative contribution of agriculture to total production declined from nearly 34 per cent to little more than 29 per cent, while that of industry rose from 17 per cent to well over 18 per cent.

In other ways, however, agricultural performance was inadequate in many developing countries. This applies less to the export subsector—whose growth was strongly influenced by market conditions abroad, especially in the developed market economies where

<sup>2</sup> The 1955-1965 rate has been calculated from the national accounts of thirty-nine developing countries, valued at constant (1960) prices. The more broadly based index of industrial production shows a substantially higher rate of growth.

demand for many of the agricultural products of the developing countries was very slow-growing—than to the domestic subsector which in many cases failed to keep up with the expanding needs for food-stuffs and raw materials. While the export subsector often made a major contribution not only to foreign exchange supplies but also to government revenue and total savings, the domestic subsector was often the recipient rather than the source of internal capital movements.

If, in a given country, population is rising at 2-3 per cent a year and *per capita* incomes are rising at 2-3 per cent a year and the income elasticity of demand for food-stuffs averages 0.5-0.8, domestic food supply will have to rise at 4-5 per cent a year if the risk of potentially inflationary price rises is to be avoided.<sup>3</sup> As indicated in chapter I, there are very few developing countries that have achieved such a rate of increase in domestic food production. The result has been an increasing reliance on imports—something that most developing countries can ill afford in view of their foreign exchange stringency and their manifold needs of imported investment goods.

Nor is the problem confined to an abstract commodity called "foods-stuffs". There is a wide range of foods and the demand for different types expands at different rates as incomes rise. In general, the shift is from calorie sources to higher-protein food-stuffs: different crops are involved and a corresponding reorientation of cultivation methods and requirements. Thus the process of economic development calls not only for higher rates of production but also for a technical and organizational dynamism which is quite alien to the traditional agricultural sector in most developing countries.

This has wide ramifications. Not only does the need to step up the rate of increase in output require an appropriate expansion in farm inputs (often in changed proportions) but the provision of many of those inputs (fertilizers, water and implements, for example) has important industrial implications, while the handling of the expanded output creates a new range of marketing problems (of storage, processing and transport, for example) quite unknown when the distribution of crops did not extend far beyond the immediate district of the farmer.

The process of turning a farm into a factory raises many new problems. One of the most awkward for many developing countries is the question of the size of the plant and the legal and institutional

<sup>3</sup> It has been estimated that in India, a planned rate of industrial expansion of 12 per cent a year would require an increase of 6.6 per cent a year in agricultural output to sustain it without damage to either external or internal balance. See Ashok Rudra, *Relative Rates of Growth: Agriculture and Industry* (University of Bombay, 1967).

forms of operation and ownership: technical requirements of modernization often clash with traditional tenure systems. The multiplication of inputs also accentuates the more familiar problem of finance: farm credit systems have tended to concentrate on offsetting the seasonality of harvests. The needs and risks of finance increase rapidly as the proportion of purchased inputs rises.

The provision of credit cannot be separated from the question of price. Governments tend to be involved in this in the developing countries no less than in the more advanced countries, and in some ways both the need and the difficulties of price administration are magnified by the nature and pace of the changes that a speeding up of the development process will induce in agriculture. The price of a crop often remains the key incentive to innovation, but increasingly, the price that determines farm incomes will become a relative price—taking into account the cost of purchased inputs. If agricultural productivity is successfully placed on a steeper upward trend, the problem of maintaining the appropriate relationship between the prices of the produce the farmer sells and the prices of the industrial goods he has to buy will require continuous surveillance. The balance involved is an extremely fine one: the need to keep down the cost of industrial inputs (including workers' food-stuffs) and to maximize the off-take of rural savings has to be weighed carefully against the need to maintain incentives for an expanding flow of farm produce.

Increasingly, moreover, this flow of farm produce moves through the industrial sector rather than directly to the end-user. Indeed, factories based on the processing of agricultural raw materials generate the bulk of the industrial contribution to total production in many developing countries. Not only food processing is involved but also such industries as textiles, leather and rubber products, paper, tobacco and beverages; in 1958 they were estimated to account for about half of the total value added and almost two-thirds of the employment in manufacturing in the developing countries.<sup>4</sup> These industries and their raw material requirements have been growing at over 5 per cent a year, somewhat faster than the gross domestic product of the countries concerned.

As suggested above, these are pre-eminently the problems of domestically oriented agriculture, which in many countries has been a serious drag on economic growth in recent years. Export-oriented agriculture obviously shares some of the same difficulties, though generally to a less degree. Dependent on changes in supply from other countries and in demand

on a world market—over neither of which can an individual developing country exercise much influence—export agriculture has its own problems, too. Since, for purposes of economic development, it is on export agriculture that most developing countries have to rely for easing the foreign exchange constraint, these problems will remain high on the priority agenda for the period immediately ahead.

The incomes that are earned in the agricultural sector are important not only from the point of view of the level of living of the farmers and as a source of savings for the economy as a whole but also as a component of the demand for the output of the other sectors. Where market size is a serious limitation on the pace of industrialization, the capacity of the agricultural population to buy the goods produced in local factories is an important determinant of the rate of over-all economic growth. Indeed, this intersectoral complementarity lies at the heart of balanced and self-sustaining growth. In due course, it will require a slowing down in the rate of increase in certain agricultural products—especially those with low income elasticity, such as the basic calorie sources, as has happened in the higher-income countries. But for most developing countries that day seems far off: levels of consumption are too low to permit any present slackening in the efforts to accelerate agricultural growth.

#### *Land problems and policies*

Problems of land use and ownership are among the most ancient, vast and various of those affecting the process of economic development. In the context of the present discussion, however, it seems desirable to limit attention to two aspects which have a special bearing on agricultural progress. The first is the question of the size of the production unit; the second is the question of the capacity of the institutional set-up to transmit economic signals to the producer and permit appropriate changes in the organization and methods of production in response to those signals. The two problems are closely related and efforts to deal with them have seldom been undertaken separately; generally they have been tackled through much wider ranging programmes commonly referred to as "land reform".

The need to modify prevailing conditions regarding farm size and organization differs greatly from country to country, as do the impediments to such adjustments. By and large, the problems tend to become more difficult the closer the settlement of population and the greater the competition for land. Similarly, the urgency of modification varies with the increase in capital intensity: the higher the proportion of purchased inputs in total cost the more necessary does it become to put the producer into a position from which he can exercise full entre-

<sup>4</sup> See *The Growth of World Industry 1938-1961: International Analyses and Tables* (United Nations publication, Sales No : 64.XVII.8), pp. 320-327.

preneurial and management responsibilities. Neither shifting cultivation nor uncertain tenure is conducive to the sort of technical changes on which higher productivity depends.

Because most of the efforts that have been made to improve land ownership and tenancy systems in developing countries have had varied and different objectives—political and social motives have indeed often outweighed the purely economic and technical—it is impossible to draw valid conclusions regarding the degree of success on the basis of subsequent production performance. Nevertheless, some of the reforms that have been effected have a clear relevance to the problems of agricultural development.

Perhaps the most obvious is the reform of tenancy systems. This has generally encountered less opposition from landowners than more thoroughgoing changes in the distribution of land, and it has appealed to Governments because it usually can be effected without large outlays of public funds. Yet it can serve the cause of agricultural development well by increasing the security of tenants to the extent necessary to overcome their reluctance to invest in the land they farm, and also by increasing their involvement in the whole farming venture and their share of the crop proceeds and hence their responsiveness to incentives and income-raising innovations. In some instances—China (Taiwan) in the early 1950's and the Philippines in the early 1960's—tenancy reforms have been intended as the precursor of more far-reaching land reforms, providing the tenants with a half-way stage to test their abilities to stand up to the responsibilities of full ownership.

Most tenancy reforms have aimed at cash rentals, fixed for some years ahead and in many cases at lower rates than those customarily paid in the past. That this had not always been achieved reflects not only the opposition of landlords and the general illiquidity of the agrarian sector but also the reluctance of tenants to forgo the risk-sharing advantage of sharecropping. This has led to the suggestion that the system of sharecropping might itself be retained and improved by a sharing of the cost of inputs between landlord and tenant in the same proportion as the subsequent claim on output. In Ceylon the attempt to improve the system has taken the form of the fixing of a legal maximum for the landlord's share (in bushels of rice per acre of paddy land). This should leave the tenant with a stronger incentive to raise productivity.

Maximum rentals have also been set in Nepal (a fourth of the crop), Peru (a fifth of the average crop of the three previous years) and the Philippines (a fourth of the crop less the cost of seeds and harvesting). In China (Taiwan) the average rental was reduced from 50 per cent to 37.5 per cent

of the crop and in the United Arab Republic the average rental was nearly halved by two agrarian reform efforts (in 1952 and 1961). The smaller the proportion of the crop left with the tenant the weaker the impact of the market is likely to be, and the less effective any direct incentive measures. But rent controls are no better than their enforcement and the greater the pressure on the land the harder it will be to prevent rents from rising. In China (Taiwan), firm six-year tenancies seem to have helped. Local tenant farmer organizations have helped in Burma since 1965, but were less successful in Ceylon late in the 1950's.

While rent controls may help to improve tenant farmers' response to the agricultural development effort, it is clear that in most instances they have been motivated more by the desire to make agrarian society more equitable. From the productivity point of view, there is no special merit in tenancy arrangements as such; a landowner who buys his farm inputs and hires labour may in fact form a more efficient production unit than would a landlord whose farm is cultivated by tenants. Decisions on such policies clearly depend on the state of the whole economy and, in particular, on the rate at which labour is leaving the land and being absorbed in industry.

This applies with even more force to land reform proper, the essential feature of which is a redistribution of some proportion of cultivable land in the interest of greater social equity, higher agricultural productivity and keeping the urban drift of the rural landless in line with the rate of expansion in industrial employment. These three main objectives, while not necessarily mutually incompatible, may not always be equally desired or attainable, and their relative weight has differed from case to case.

Most of these reforms have involved the setting of a ceiling on individual landholding. This has varied with the existing distribution, the ratio of landless to cultivable land area, the quality and topography of the land and the nature of the crops as well as with the political power of the existing landowners and the emphasis of the purpose of the reform. One of the earliest of the post-war reforms set one of the lowest limits on landholding: in 1948, the Republic of Korea fixed the maximum family holding at about eight acres (excluding tree crops). In China (Taiwan), the ceiling prescribed in 1953 was about eight acres of irrigated (or sixteen acres of unirrigated) land. In the United Arab Republic, it was fixed in 1952 at just over 200 acres and then reduced in 1961 to about 100 acres. In western Pakistan, it was fixed at 500 irrigated acres or 1,000 unirrigated. In Iraq, the limits set in 1958 were about 650 acres of irrigated land or double that of rain-fed land.

The impact of such redistributive arrangements has varied with the vigour with which they have been implemented. The limitations have been more stringent when applied to families than where applied to individual farmers or corporate entities. The proportion of owner-farmers rose rapidly in China (Taiwan) and in the Republic of Korea. In Iraq, on the other hand, the bulk of the 6 million acres of land taken over from private owners has not been reallocated: it has continued to be farmed by tenants.

The effect has also varied with the way in which the reform has been financed. The gains have been greater when the ex-landowners have been able to use their compensation moneys—mostly in the form of government bonds—to divert their resources to other forms of investment. The gains have also been greater when the new owners have been able to repay their debt to the State over a sufficient length of time to minimize the drain of resources from their new farm activities. But most of all, the benefit of the programme has depended on the extent and quality of the technical support the Government was able to bring to bear on the reorganized agricultural sector.<sup>5</sup>

This support—discussed in the next section—is a basic need of the agricultural sector in most developing countries in normal circumstances; the launching of a relatively large number of newly independent farmers makes the need that much more urgent. It points up the desirability of careful technical preparation of any land reform programme. This may mean some deliberate phasing to keep the claims for assistance constantly within the competence and capacity of the agricultural machinery at the Government's disposal.

Given such support, there is no reason why a land reform should be even temporarily disruptive of national agricultural output. In India, the transfer of ownership rights to about 20 million cultivators in the period 1951/52-1953/54 played a large part in the acceleration in farm production in the first half of the 1950's. In the United Arab Republic, the two phases of the reform—affecting about 13 per cent of the cultivated area in 1952 and about half as much in 1961—kept the problem of raising the level of skill of the new farmers within the capabilities of the administrators; as a result, significant increases in productivity were registered in the areas concerned.<sup>6</sup> In China (Tai-

wan), the reforms were also a major contributor to the subsequent improvement in agricultural performance: between 1949 and 1964, the area cultivated increased by a mere 2 per cent, the farm population grew by about 40 per cent while farm production expanded between two and threefold. Yields in the crucial rice crop rose by over 80 per cent.

### *The provision of farm inputs*

The industrialization of agriculture that characterizes the process of economic development tends to reduce the independence of the farms. They are brought increasingly into the cash nexus, and for their efficient operation they come to rely on a widening inflow of goods and services from the rest of the economy. The increased division of labour implied in this interdependence not only helps to raise agricultural productivity—especially the yields per acre so crucial in densely populated countries—but also helps to raise the efficiency of factory operations by extending the market and facilitating economies of scale.

Changes in productivity have in fact ranged very widely in the post-war period. In the case of the all-important cereal crop, for example, changes in average production between the first half of the 1950's and the first half of the 1960's were negative in Morocco, Tunisia and Uruguay, but over 50 per cent in Brazil, Ceylon, Kenya, Venezuela and West Malaysia, almost 70 per cent in the Republic of Korea and 90 per cent in Mexico (see table 28). And the proportion of these increases contributed by rising yields per acre covered an equally wide spectrum—from negative in some countries to virtually the whole gain in such countries as China (Taiwan) and the United Arab Republic. In none of the developing countries, however, did productivity gains approach those registered in Japan and the United States where larger crops were grown on appreciably smaller acreages.

Recent experience suggests that the inputs that are likely to make the most important contribution to agricultural development are technical expertise, new varieties of seed, water, fertilizers, pesticides and implements. The provision of each of these input categories presents its own special problems in the context of each country—and in some cases of each district—but one of the principal considerations lies in their interrelationships. In general, these inputs are required in combination and their contribution to production tends to depend very greatly on their availability in the optimum proportions.

Almost every developing country has a ministry and department of agriculture; most have so-called "extension services" to carry information to the field, and some have research facilities for investigating the

<sup>5</sup> For a recent assessment of the problems and achievements of land reforms and the need for "complementary measures" of an institutional and technical nature to back them up, see United Nations, "Report of the 1966 World Land Reform Conference" (E/4298).

<sup>6</sup> In the co-operatives established at Al-Monshia, for example, cotton yields were then doubled between 1952 and 1964 while maize yields rose by over 50 per cent; in new co-operatives at Demera, rice yields almost doubled and maize yields increased threefold.

Table 28. Selected countries: contributions of changes in acreage and crop yield to growth in output of cereals,<sup>a</sup> 1952-1956 to 1961-1965

(Percentage)

Country	Growth in output	Change in output due to increase in:	
		Area planted	Yield per acre
<i>Developing countries</i>			
Brazil	58	81	19
Burma	30	67	33
Ceylon	54	44	56
Chile	28	46	54
China (Taiwan)	32	4	96
Ecuador	35	113	-13
India	27	33	67
Israel	44	19	81
Kenya	57	113	-13
Mexico	91	47	53
Morocco	-21	-64	-36
Pakistan	31	36	64
Peru	21	68	32
Philippines	30	87	13
Republic of Korea	68	31	69
Sudan	45	81	19
Syria	28	36	64
Thailand	39	54	46
Tunisia	-9	-155	55
United Arab Republic	26	-5	105
Uganda	17	73	27
Uruguay	-29	-95	-5
Venezuela	54	108	-8
West Malaysia	52	41	59
<i>Developed market economies</i>			
Australia	60	93	7
Canada	-4	-109	9
Japan	10	-74	174
United States	24	-57	157

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on data from Food and Agriculture Organization of the United Nations,

*Production Yearbook* (Rome).

<sup>a</sup> Cereals include wheat, rye, barley, oats, maize, millet, sorghum and rice.

technical problems affecting farm production. Nowhere, however, are the knowledge-seeking and knowledge-spreading facilities adequate. Below a certain scale of operations, such services tend to be unproductive and few developing countries have been able or prepared to provide the necessary financial resources to bring them up to that minimum. The knowledge and experience of extension officers often do not stand up well in the face of the traditional wisdom of the local farmers; and they are seldom numerous enough to be spread around the farming districts in a way that would enable them to acquire the essential local knowledge and win the confidence of the cultivators. As field workers are often poorly remunerated by local civil service standards, there is a tendency for them to seek headquarter posts rather than endure the hardships of life in the remoter rural areas—which are usually those in greatest need of assistance in modernizing.

Even when knowledge is sound and enthusiasm high, the scale of operations may be too small to be rewarding. To convince conservative peasants of the

superiority of new techniques often requires proof on a large and dramatic scale. Annual fluctuations in yield are too common for marginal gains on small demonstration plots to carry conviction. Cultivators who are leaders in the community must be persuaded and this is often beyond the power of a young officer armed largely with newly acquired textbook information. The problem is accentuated by the community's dependence on verbal instruction and practical demonstration; the high incidence of illiteracy rules out reliance on pamphlets and the printed instructions that play a major part in the extension services of more advanced countries.

Scale is important in research, too. It is no accident that the recent genetic advances that are of the greatest potential advantage to the developing countries have been the fruit of long and massive experimentation in research stations financed by wealthy private foundations. The work that led to the development of the Mexican dwarf wheat varieties at the International Maize and Wheat Improvement Centre of Chapingo began in 1943 when the Mexi-

can Government requested the Rockefeller Foundation to assist it in research and training for the improvement of local food production. The new short stiff-stemmed rice now beginning to make a major impact in the paddy fields of south-eastern Asia was developed in five years of intensive research at the International Rice Institute set up by the Rockefeller and Ford Foundations at Los Baños in the Philippines.<sup>7</sup>

Pakistan imported 350 tons of dwarf wheat seed from Mexico in 1965 and by the 1967/68 season had planted 2 million acres. India planted about 5 million acres with new wheat and rice varieties in 1966/67 and set a target of 15 million acres for 1967/68. A sizeable acreage has also been planted with high-yield rice in the Philippines, and Afghanistan has also introduced the new seed. In Kenya, an increasing acreage is being given over to new varieties of hybrid maize. The consequences of these plantings have already been felt at the local level and may soon be visible at the national level.

These seed varieties are by far the most important of the new farm inputs. But their potential for increased food production will not be fully realized unless the full complement of necessary associated inputs can be made available. These include not only the knowledge of the new and more exacting cultivation techniques and more mechanical aids to speed up farm processes but also appropriate quantities of water, plant nutrients and pesticides. These are by no means new inputs, but the scale and precision of the new requirement are likely to pose serious supply problems in the years immediately ahead.

Experience with the new rice varieties has demonstrated the need for more equipment. IR-8 matures in 120-125 days, as contrasted with 150-155 days for the traditional varieties it replaced in the 1967 campaign. Similarly ADT-27 matures in about 105 days in contrast to 180 days required by the traditional seed used by Tanjore farmers in Madras in India. When planted at the customary times at the outset of the monsoon, the new rice matures well before the end of the monsoon. Once ripe, it must be harvested quickly and artificially dried lest it germinate. Traditional rice which matures after the monsoon can be harvested in the more leisurely fashion and sun-dried on the roads. The new varieties require mechanical drying and, in many instances, mechanical threshing also. In 1967 the Indian Government had to construct mechanical drying centres on an emergency basis in Tanjore in

order to minimize paddy spoilage from the bumper crop. Because of this quick maturation, it is possible to plant a second crop of rice before the end of the monsoon. But the preparation of the seedbed to use monsoon rainfall may not be effected rapidly enough using traditional bullocks and bullock-drawn equipment. Greater use of mechanical power may be essential. Similarly, under some conditions, tractors may have to be used for seedbed preparation to realize the full potential of Mexican wheats.

The new rice varieties also require more careful water management. This may strain not only water-storage facilities but also the means of controlling the flow. The result will be an increased demand both for irrigation and for pumps and motive power. The area of irrigated land has risen steadily in the developing countries in the post-war period, especially in places where uncertain or irregular rainfall created drought and flood hazards. Irrigation has also been extended from hydroelectric projects constructed primarily to meet power needs. By the mid-1960's, virtually all arable land was under irrigation in the United Arab Republic, more than half in China (Taiwan) and the Republic of Korea, a fourth or more in Chile and Israel and between 15 and 20 per cent in a number of other countries, including Ceylon, India, Mexico and Thailand. Harnessing of the Indus headwaters will add greatly to the irrigated area in Pakistan.

Further exploitation of the hydroelectric potential of their river systems will continue to add to the irrigated farmland in many developing countries. Nevertheless, the area so served is likely to remain relatively small and the high capital costs of extensive dam building and canalization as well as the high evaporation losses common in hot, dry localities militate against this method of providing water, except in the case of intensive multiple cropping or special high-priced products such as vegetables and fruit. It is significant that in India investment in major irrigation works set down for the third plan (1961/62-1965/66) was less than half fulfilled, follow-up facilities such as field channels and reservoirs showing a particularly marked lag, while the target for minor works was more than fulfilled.

The emphasis in many places may have to be on the effective tapping of underground water by means of tube wells and pumps, on local conservation of rainwater and on other less capital-intensive methods of assuring the supply of moisture at critical growing periods. It is estimated that in the second plan in Pakistan (1960/61-1964/65) some 4 million acres were newly irrigated by means of the installation of 30,000 tube wells, many of them operated by pumps linked to the spreading network of rural electrification.

<sup>7</sup> Of the \$400 million spent by the Ford Foundation on developing countries between 1951 and 1966, rather more than a fifth has gone into agriculture. The Ford and Rockefeller Foundations are planning to establish a third institution for tropical agriculture, this time to work on African problems in Ibadan in Nigeria.

Fertilizer usage has also been rising rapidly in many developing countries (see table 29). Between the mid-1950's and the mid-1960's, the consumption of chemical fertilizers increased more than tenfold in Iran and Pakistan, more than fivefold in India, Thailand and Uruguay and around threefold in Brazil, Jamaica, the former Federation of Malaya, the Philippines and Syria. But the difference in the intensity of application between developing countries and the more advanced countries is still a very wide one. The average in Africa is not much more than one kilogramme per arable acre; in

South America, it is about four kilogrammes and in southern and south-eastern Asia not much more. These figures are small compared with the averages recorded in the United States (21 kilogrammes), Europe (42 kilogrammes) and Japan (123 kilogrammes). Indeed, it is possible that in many instances, the use of chemical fertilizer was more or less ineffectual because of the smallness of the dosage and because of its haphazard application to different seed varieties and under different moisture conditions. Inadequacies in supply are by no means the only difficulty to overcome.

Table 29. Selected developing countries: consumption of chemical fertilizers, 1954/55-1955/56 to 1964/65-1965/66  
(Annual average in thousands of tons)

Country	Nitrogenous (N)		Phosphate (P <sub>2</sub> O <sub>5</sub> )		Potash (K <sub>2</sub> O)		Total		Index 1964/65- 1965/66 (1954/55- 1955/56 = 100)
	1954/55- 1955/56 <sup>a</sup> , b	1964/65- 1965/66 <sup>c</sup> , d	1954/55- 1955/56 <sup>a</sup> , b	1964/65- 1965/66 <sup>c</sup> , d	1954/55- 1955/56 <sup>a</sup> , b	1964/65- 1965/66 <sup>c</sup> , d	1954/55- 1955/56 <sup>a</sup>	1964/65- 1965/66 <sup>c</sup>	
Argentina	8	13	7	2	3	6	18	21	115
Brazil	23	61	30	92	39	81	92	233	254
Burma	1	6	—	—	—	—	—	—	—
Ceylon	21	41	2	1	16	30	38	72	189
China (Taiwan)	79	142	29	37	12	41	120	220	183
India	126	547	13	141	11	76	151	764	507
Iran	1	20	2	12	—	3	3	34	1,097
Israel	11	24	14	12	—	4	25	37	146
Jamaica	5	9	—	2	1	7	5	18	345
Mexico	72	109	13	59	4	7	89	176	197
Morocco	6	12	15	22	5	8	25	42	165
Pakistan	11	121	1 <sup>e</sup>	11	— <sup>f</sup>	2	13	134	1,049
Philippines	22	54	8	28	4	—	30	82	274
Republic of Korea	151	187	20	121	10	41	180	349	193
Sudan	13	23	—	—	—	—	—	—	—
Syria	5	13	1	4	—	—	6	17	290
Thailand	2	17	—	11	2	5	5	32	629
United Arab Republic	114	244	39	46	1	1	153	291	189
Uruguay	2	10	5	22	—	4	6	32	502
Venezuela	5	29	5	—	4	—	14	—	—
West Malaysia	12	27	2	5	4	14	18	47	257

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on Food and Agriculture Organization of the United Nations, *Production Yearbook*, vols. XI and XX.

<sup>a</sup> Average for 1956/57-1957/58 for Iran.

<sup>b</sup> Average for 1955/56-1956/57 for Republic of Korea.

<sup>c</sup> Average for 1962/63-1963/64 for Argentina.

<sup>d</sup> Average for 1963/64-1964/65 for Brazil, Iran, Jamaica, Thailand, United Arab Republic and West Malaysia.

<sup>e</sup> Total of nitrogenous (N) and phosphate (P<sub>2</sub>O<sub>5</sub>) fertilizers for Israel, Philippines and Uruguay.

<sup>f</sup> For potash, average for 1956/57-1957/58; for phosphate, average for 1955/56-1956/57.

The production of chemical fertilizer has been stepped up sharply in a number of developing countries. Pakistan increased its output to 0.8 million tons a year by the end of the second plan in 1965, approaching two-thirds of current requirements. By the mid-1960's, the United Arab Republic was producing about two-thirds of its requirements and was planning to become self-sufficient by the end of the decade. By the mid-1960's, China (Taiwan) had become a net exporter of nitrogenous and phosphate fertilizers and was importing only

potash. In India, however, local production continued to lag behind needs: of the 1966/67 supply of 1.3 million tons, over 0.9 million was imported. Foreign exchange expenditure for fertilizer imports in 1967/68 is expected to amount to over \$0.25 billion.

The need to increase the supply of fertilizers available to the cultivator represents a major industrial challenge to the developing countries. This is not only a question of expanding domestic capacity in many of the food-deficit countries, but also one

of facilitating the growth of trade between developing countries with a raw material surplus and those whose requirements are likely to outpace domestic production, at least in the foreseeable future. As leading exporters of raw phosphates and of the petroleum from which most nitrogenous fertilizers are now obtained, there are a number of developing countries that might well play a significant role in meeting the increase in demand for these plant nutrients.

As the new seed varieties lend themselves to much denser planting than traditional long-stemmed types, they tend to create an environment more favourable to insect infestation and the spread of fungus and other diseases. Pest control and other forms of plant protection—only marginally helpful in raising yields in the old circumstances—are likely to become much more important, if not crucial. Like the growth in the demand for fertilizers, the need to raise the use of pesticides will pose a major challenge to industry. And where local industrial capacity is too small, there is likely to be a claim—of a high-priority nature—on foreign exchange for imports.

The nature of the input problem is illustrated in a dramatic way by recent trends in India where two successive failures of the monsoon precipitated a food crisis and a reappraisal of development strategy. Between 1952/53 and 1964/65, the land area under cultivation increased by about 15 per cent, the number of agricultural workers by about 4 per cent and the acreage under irrigation by about 33 per cent—from a sixth to a fifth of the gross area sown. It is not at all clear that optimum use was made of the availability of water: in the mid-1960's only about 15 per cent of the net irrigated area was planted more than once a year, much of the multiple cropping being carried out on un-irrigated land. Increasing the crop burden of the soil necessitates the provision of plant nutrients. The use of chemical fertilizers, hardly measurable in the early 1950's, expanded tenfold in the twelve years ending in 1964/65 and is estimated to have doubled in the two following years and to have exceeded 2 million tons of plant nutrients (measured as N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O) in 1967/68 when nitrogen consumption reached the total used in the United States on a comparable crop area in the early 1950's.

On the basis of the results so far achieved with the new high-yielding cereal varieties, it has been estimated that in order to obtain a 5 per cent *per annum* rise in domestic output of food grains over the five years from 1967/68, India will have to aim at an increase of 1 per cent a year in total planted area, 6 per cent a year in irrigated food-grain area, 30 per cent a year in the area planted with high-

yield seed and 20 per cent a year in fertilizers.<sup>8</sup> This implies sharp increases in all the critical inputs, with consequential strain on technical services, seed farms, the various manufacturing industries involved and the transport system, and in so far as local industries cannot supply the required quantities, a strain on foreign exchange, too.

### *Handling farm outputs*

The industrialization of farming creates a logistic problem that is quite new to many developing countries. It is clear from the previous section that the volume of purchased inputs is likely to rise rapidly as agriculture is modernized. By the same token, the marketable output will involve even greater tonnages; and the average distance over which these tonnages are moved will tend to increase as the specialization of labour proceeds.

In India, the density of road linkage between farmland and provincial centres (that is, road mileage per square mile of cultivated area) is about a sixth of the figure in more advanced countries, and the quality of the roads is much poorer. One-third of Indian villages are more than five miles away from the nearest road and an estimated million miles of roads would be required to provide access to all the villages.

The problem of handling is not only a matter of transport. Storage facilities are required on or near the farm, at the railway nodes and at the mills and other processing plants. Even the good 1967/68 harvest is severely taxing the storage capacity in Pakistan so that considerable investment will be required to provide for an acceleration in the rate of increase in farm production.

The need is urgent, as the inadequacy of existing facilities in many developing countries is one of the principal reasons for high loss ratios: damage by rodent, insect and mould already accounts for a high proportion of wastage between the farm and the consumer. The low efficiency of local mills also tends to contribute to the difficulty: up to 10 per cent more rice can be obtained from a given volume of paddy if it is handled in a more modern mill.

In a number of countries, particularly in Africa, storage facilities have been improved through government support of private investment: loans have been made available for the construction of grain silos and other types of containers. In some cases, in Latin America and in Africa, improvements in warehousing have been effected in connexion with

<sup>8</sup> See United States Department of Agriculture, *Accelerating India's Food Grain Production 1967-68 to 1970-71*, Foreign Agricultural Economic Report No 40 (Washington, D.C., March 1968).

the building up of commodity reserves for price stabilization purposes. In India, a National Co-operative Development Warehousing Board is still engaged in constructing food storage capacity scheduled under the third plan. During the 1966-1967 drought, storage capacity in some of the states was more than adequate for the supplies available.

The physical efficiency of marketing may make a big difference to the response of producers: the less the loss between farm and consumer the more readily are cultivators likely to react to price incentives. In many developing countries, efforts have been made to raise efficiency by creating a public or semi-public marketing agency which takes over responsibility for the crop by purchase on the farm and handles it as far as the mill or the wholesale distributor. If the administration has been proficient and the price satisfactory (see the ensuing section for the problems in this area) such public marketing agencies seem to have served the farmer well, especially in comparison with the uncertainties of sales or pledges to local traders or moneylenders. Their difficulties, apart from the almost universal one of finding and retaining competent staff, have been chiefly connected with the geographical spread of operations: it is very expensive to service remote small-scale cultivators.

To meet this problem, Governments have tended to rely on encouragement of co-operation among the farmers concerned. Co-operatives run into the same problems of administration, however, and unless there has been strong leadership or a solid nucleus of professional staff, they have often failed to hold together, especially when the crops are abnormally large or small. They have generally fared better when the commercial aspects of their activities have been underwritten by official price guarantees. This has tended to happen with some crops in such countries as Ceylon, China (Taiwan) and the Republic of Korea where the farmers' co-operative became in effect the buying agent (on a commission basis) of the official stabilization agency. This seems to have been the main factor in the success of co-operative marketing in the United Arab Republic: the proportion of the cotton crop handled by the co-operative rose from a mere 3 per cent at the time of the 1953 agrarian reform to 100 per cent by 1965, with the growers getting a rising share of the amount realized. In China (Taiwan), the efficiency of the farmers' associations was materially improved by the Government's provision of training courses for their various officers.

While many of the developing countries still have to solve the purely physical problem of moving and storing large tonnages of agricultural produce, the process of economic development tends to change

some of the technical requirements. The extension of the distribution network, the special needs of urban living, the changes in tastes brought about by higher incomes, town life and exposure to overseas influences all tend to necessitate changes in the ways in which farm produce is marketed. Whether it is a simple alteration in the size or form of packaging, the standardization of size or quality, the addition of mould retardants, milling, dehydration, sterilization, or the canning or processing in more elaborate ways, all such changes affect the marketing problem both physically and economically. They also open up opportunities for industrial development linked closely to the raw material base provided by the farms.

### *Credit and price policies*

Any increase in the proportion of purchased inputs tends to magnify the problems of finance. In some areas, indeed, inability to finance technical improvements is a more significant constraint on agricultural advance than is ignorance or fear of the risks, both common inhibitors of peasant progress. Traditionally, cultivators in many developing countries, especially in Asia, have depended on landlords and local traders to fulfil the function of moneylender. The resultant growth of peasant indebtedness has been a major factor in stultifying the rural economy and retarding the process of development. One of the principal objectives of agrarian reform in many developing countries has been to loosen the agricultural sector from these institutional bonds.

As commercial banks have played little part in the provision of credit to farmers in most developing countries—less than 1 per cent in Ceylon and India, for example—Governments have usually found it necessary to establish special credit mechanisms to complement land reform programmes. Notwithstanding the setting up of various new institutions and official support for older co-operative associations, the traditional patterns of credit have persisted to a surprising extent. In India, rural surveys showed that new institutional sources furnished no more than 3 per cent of all farm credit in 1955 and less than 15 per cent in 1962/63; the rest continued to come from moneylenders and traders and from relatives and friends. In the mid-1960's institutions provided about 8 per cent of farm credit in Ceylon, 10 per cent in Nepal and Thailand, 20 per cent in the Philippines and about 30 per cent in the Republic of Korea.

In China (Taiwan), however—where before the 1949 reform, over 80 per cent of farmers' borrowing was from private sources, mainly landlords—the institutions have made more rapid headway: they were providing over half the farmers' credit by the

end of the 1950's and over 80 per cent by the mid-1960's. Here the resources of the farmers' associations were enlarged as a result of merchants being permitted to make deposits as "associate members". In 1961, moreover, a Unified Supervised Credit Programme was inaugurated, setting up in effect a revolving fund within the farmers' associations.

From the point of view of the farmers, the main advantage flowing from the setting up of special lending institutions has been a decline in interest rates. Given the willingness of the private lenders to compete, farmers have often found it convenient to continue to borrow from the traditional source, especially when the new institutions practised cumbersome procedures and set conservative limits on their lending. Ironically, the institutions sometimes seem to have catered to the less reliable segment of the farm population: low limits on loans have not prevented poor recovery ratios.<sup>9</sup> The linking of trade and credit transactions through the same organ seems to have engendered a better borrower performance. Thus, where regular co-operatives have been strengthened to provide a certain amount of credit to their members—as in India (with active Reserve Bank support), Kenya and the United Arab Republic—the flow of advances and repayments seems to have been more satisfactory.

This link has led to the concept of "supervised credit", administered as a normal farm input and often combined with other inputs—including, in particular, technical advice and assistance—in packages tailored to the borrowers' specific needs. Pioneered in Mexico in the 1950's in connexion with the promotion of poultry farming at Pátzcuaro, it was adapted, as indicated above, in China (Taiwan) and also in the Republic of Korea where a National Agricultural Co-operative Federation was created in 1961 by amalgamating a marketing co-operative and an agricultural bank. Subsequently, this method of associating credit with other inputs has spread to other developing countries. Providing the tie is not too close—thus unduly limiting the organizations' activities—a mechanism through which the relationships among the various inputs can be more clearly seen may often prove helpful.

That the problem has not been solved, however, is evidenced by the rash of new institutional arrangements established or being discussed in India in the light of the great increase in rural credit requirements implicit in a new attack on its food problem through the new cereal varieties referred to above. New funds have been voted to the land

development banks and to the Agricultural Refinance Corporation. New agro-industries corporations have been set up as well as agricultural development corporations to operate in states in which co-operatives are weak in the financing sphere. The commercial banks have also made provision to increase their low level of lending for agricultural production.

Recent concern over the lag in agricultural production has also given rise to some critical reappraisal of price policies. In many developing countries, these policies have been coloured by the desire of Governments to promote industrial development. For that purpose, it was convenient to have cheap food and to price the flow of raw materials from farm to factory as low as possible. With the urban population expanding very rapidly and political power moving towards the cities, there was an added advantage in holding down food prices. Where development was pushed to the point of generating excess demand, the anxiety not to allow food prices to rise (and stimulate a claim for higher wages and thus add to the inflationary pressures) was reinforced. There can be little doubt but that in many cases the resultant policies underestimated the responsiveness of farmers to changes in prices and income. In some countries, the lag in agricultural output reflects, at least in part, the farmers' reaction to a deterioration in his terms of trade.

Governments are involved in agricultural price administration in the developing countries just as they tend to be in the more advanced countries. The need in the first instance is for short-term stability; as most farmers have to sell most of their crop immediately after harvest, free market prices would tend to sink very low and then probably rise slowly to a peak just before the next harvest. To assure the farmer of a more stable price (and income) most Governments fix prices at least for the basic food-stuffs, or set a price range and enter the market as buyer or seller to hold the trading price within that range, or set up an agency to buy all or most traded supplies. Once in the market, the Government cannot but influence longer-range prices for the commodity concerned. Hence the question of price policy is an inescapable one for most developing countries, at least in respect of the major agricultural commodities. (The problem of those sold on world markets is discussed in the next section.)

The positive response of producers to a price increase has been exemplified in a number of developing countries in recent years. In Ceylon, for instance, guaranteed rice prices well above world market levels raised production and yields between the first half of the 1950's and the first half of the

<sup>9</sup> A recent study of their activities found overdue rates of 50 per cent or more to be quite common. See Food and Agriculture Organization of the United Nations, *Agricultural Credit through Co-operatives and other Institutions* (Rome, 1965).

1960's well above the average registered for the southern and south-eastern Asian region as a whole. (The Government sold the rice in rationed amounts at well below cost price—and at the cost of considerable budgetary strain.) In Brazil, domestic wheat production was raised sharply in the early 1950's by means of high price supports; and it subsequently declined when prices were lowered. The expansion in sugar production in India, Lebanon and Pakistan is ascribed largely to the effect of the offer of a high price. In the United Arab Republic, bean production was raised rapidly in 1964 by means of a substantial price increase, and more recently rice production has been similarly stimulated. Guatemala cut its wheat imports by paying higher prices to domestic producers. Conversely, Indonesian rice production showed very little growth between the mid-1950's and the mid-1960's when official prices were held very low.

These instances are not cited as examples of sound economic policy but merely to illustrate the possible impact of price decisions and arrangements. In practice, sound price policies are extremely difficult to effectuate with any degree of precision, and when productivity is changing rapidly the difficulty is enhanced. In the present context of agricultural development, the focus will need to be on the ratio of input prices and output prices. If farmers are to be encouraged to undertake the technological advance implicit in modernization, the relationship between the prices of the inputs they will have to purchase on an increasing scale and the prices they are paid for their crops will have to be made sufficiently favourable.<sup>10</sup> Where a protection policy for industry has resulted in a relatively high price for certain farm inputs, this will need to be taken fully into account in the setting of farm output prices. The operation may well be an intricate one if productivity is changing rapidly as development proceeds. Where an expansion in food production is an urgent matter, it would especially be necessary to keep up the momentum of technical advance rather than risk an over-rapid shrinkage in incentive. If adjustments in the price parity formulae cannot be made fine enough or rapidly enough, fiscal steps might be taken to keep farm incomes in line with the development of the economy as a whole.

A special complication exists in India as a result of the restrictions that exist on interstate trade in food-grains. In recent years, these restrictions have tended to raise prices most in those regions that have the least comparative advantage, while de-

pressing them in the more favoured areas. If the new inputs move to the higher-price regions rather than to those where farmers are receiving a lower price, it is clear that the country as a whole will not be achieving an optimal allocation of resources, and the benefits to be derived from the new advances will be much smaller than they might otherwise be.

Another incentive problem that tends to become more urgent as the proportion of purchased inputs rises is that of providing insurance against crop failure. Because of their lack of reserves (and the native scepticism which characterizes peasants in many parts of the world), cultivators often seem reluctant to innovate, and experience has shown that progress can be hastened if they can be assured that if the experiment they are being urged to undertake should fail they will find themselves in no worse position than they would have been had they continued farming along traditional lines.

Crop insurance has never been easily organized in developing countries: farm records are poor or non-existent, cultivators find it difficult to pay premiums, harvest fluctuations are often very wide, competent administrators are extremely scarce. The most general systems of insurance are to be found in Latin America, where, in recent years, there has been some tendency to bring local, private and co-operative schemes together under a single national institution. In India, a pilot insurance project was launched in the Punjab in 1960 and it is gradually being extended. Pilot schemes were conducted in Ceylon, too, between 1958 and 1962 when a national Crop Insurance Act was adopted to cover specific risks in connexion with rice cultivation. Participation is compulsory once a district has been organized and declared a crop insurance area, and by mid-1966, some 300,000 acres of paddy land were covered. Field administration is largely in the hands of the farmers' co-operatives.

There is a tendency to link insurance with the provision of supervised credit as another farm input. Certainly, the need for insurance rises with the extent of borrowing, and from the lender's point of view there is some advantage—economic as well as administrative—in being able to introduce insurance facilities into transactions with the agricultural sector as it commercializes.

### *The problem of agricultural exports*

In many developing countries, that portion of the agricultural sector which produces for exports is sharply distinguished from that serving the local market. Though many of its problems, especially on the physical and technical side, are similar to those of domestically oriented agriculture, it is often

<sup>10</sup> It is significant that in Pakistan, fertilizers were provided to the cultivators during the second plan period (1961-1965) at half the domestic cost and 30 per cent below world market price. Given crop prices and the average response of yields to increments of plant nutrients, the return on the cultivators' fertilizer outlay was over four to one.

organized quite differently. This reflects the nature of the product, the influence of foreign ownership of farms or plantations, the activities of collectors, distributors and shippers who prepare consignments for export, and the involvement of government in such functions as quality control, price stabilization and tax collection. And because of the exigencies of shipping schedules and international marketing arrangements, the logistics of the export sector are usually better organized. By definition, the export sector is part of the market structure; domestically oriented agriculture may be only partly integrated into the market economy.

Some of the basic difficulties of export agriculture are not soluble within the national framework of the developing countries concerned; they have to be dealt with in the context of demand in importing countries and of collaboration with competing exporting countries. The market weaknesses of many of these agricultural exports and their consequences for price and foreign exchange earnings were pointed out in chapter I. Some of the implications for the shaping of trade policies in the more advanced countries are discussed in chapter V. In the present context, the emphasis is on the response of the developing country itself to the problems facing its export-based agriculture.

Compared with domestically oriented agriculture, there is usually much less need for measures to stimulate production.<sup>11</sup> Indeed, in a number of cases—especially those in which attempts have been made to work out international stabilization arrangements such as for coffee, cocoa and sugar—the problem has tended to be the opposite, namely, how best to keep production under control in the light of world market conditions. And some countries have already embarked on programmes for diversifying their agriculture in order to reduce their dependence on particular export commodities, such as coffee in the case of Brazil and rubber in the case of Malaysia.

More important than stimulating output in many instances is the effort to improve and standardize quality. This has been shown to be particularly necessary in the case of agricultural commodities that have to compete with factory-based materials on the world market. For similar reasons, special importance attaches to efforts to raise efficiency on the farms and plantations concerned, and in related activities. By the same token, actions which tend to raise the cost of inputs tend to have a direct negative influence on production and investment in export-based agriculture. Where inflation-

ary pressures have been strong, Governments have often had to determine special rates of exchange for such export products. Such arrangements have often included permission to retain a prescribed share of the foreign exchange earned by the export in question.

Similar considerations apply to the methods adopted for stabilizing the prices received by the farmers concerned, and for taxing them. Marketing boards have developed into a major policy instrument during the post-war period. Usually starting as mechanisms for shielding the producer from short-term fluctuations of price on the world market, they have frequently become a leading device for taxing or subsidizing him, depending on the relationship between their buying price and realizations on the market.

#### PROBLEMS AND POLICIES OF INDUSTRIAL DEVELOPMENT

Though there may have been a tendency among developing countries to distinguish too categorically between industry and agriculture in development policies and to underestimate their mutual dependence, it is clear that the range of primary products and activities is extremely small in comparison with that of secondary products and activities, and that, in so far as the economic development process involves diversification of the economy, resources will have to move increasingly from the former to the latter. From the point of view of government policy formulation, moreover, the differences in the way the two sectors tend to be organized have important implications: influence can be brought to bear much more directly on industry with its relatively small number of well-defined and well-documented production units than on the frequently more amorphous agricultural sector where problems of institution building tend to loom large. Furthermore, Governments are apt to participate, directly or through designated organs, in the entrepreneurial function in industry to more purpose than would be the case in agriculture, and this provides them with another instrument for shaping industrial progress.

Industrial development has tended to follow two distinct paths in the developing countries, one based on export markets and the other based on the domestic market. Most countries have pursued both courses, but with the advance in the state of economic development domestically oriented industries have generally tended to preponderate. This reflects the fact that industrialization is a cumulative, mutually reinforcing process: the industrial chain tends to become lengthier and more complicated, an increasing proportion of activity being connected less with the primary producer at the one end or with

<sup>11</sup> The extent to which developing countries have gained or lost shares in the market for particular commodities in recent years is discussed in chapter III, along with some of the reasons for the changes that have occurred.

the final consumer at the other end than with all the intermediate processes. Export-oriented industries themselves augment local demand for manufactures—intermediate or producer goods required in factory operations, or as components, or for packaging and so on.

#### *Export-oriented industries*

Almost all the export-oriented industries have grown out of efforts to add to the unit value of primary-product exports. In some countries their growth has constituted the main form of industrialization. And for some commodities the resultant change in the composition of trade is quite discernible, even at the aggregate level. Thus between the mid-1950's and the mid-1960's, the relative size of the manufactured component of developing-country export trade rose significantly in a number of commodity categories—fruit (from 9 per cent to 13 per cent), vegetables (from 13 per cent to 24 per cent), organic oils (from 36 per cent to 41 per cent), hides (from 28 per cent to 37 per cent), wood (from 9 per cent to 15 per cent), fertilizers (from 2 per cent to 12 per cent), iron (from 4 per cent to 9 per cent), alumina and aluminium (from 4 per cent to 21 per cent), copper (from 51 per cent to 60 per cent), zinc (from 21 per cent to 26 per cent), tin (from 42 per cent to 63 per cent) and textiles (from 25 per cent to 37 per cent).<sup>12</sup>

The process may also be illustrated by individual country examples. Between the mid-1950's and the mid-1960's the manufactured component of the United Arab Republic cotton exports rose from 6 per cent of total value to 25 per cent. The oil component of Nigeria's ground-nut exports rose from 12 per cent to 20 per cent and in the case of Pakistan, yarn and fabrics rose from 4 per cent to 15 per cent of jute exports and from 8 per cent to 42 per cent of cotton exports.

In some ways, this form of industrial development is the simplest and most natural. The developing country starts off with the advantage of access to the basic raw material on the most favourable terms. The technical difficulties are not likely to be significantly greater than in any other manufacturing process; indeed, familiarity with the basic material and expertise in handling it may tend to facilitate the organization of such an industry in a manner not open to other forms of manufacturing. And in many instances, shipping the product is likely to be

more convenient and less costly than shipping the raw material.

The main obstacle has often lain at the marketing end. Importers of the raw material have built up their own processing industry and it has often been a feature of the tariff policy of the more advanced countries to protect such activities. As the value added to the raw material by such processing is in many instances relatively small, even a fairly low tariff may constitute a sizable barrier.

Export-oriented industries may also be established in developing countries by foreign enterprises. This has happened not only for processing local raw material but also, on occasion, in the case of assembly plants. A manufacturer in one of the more advanced countries may find it convenient to set up facilities in a developing country to serve not only the local market but also contiguous markets or markets within the same currency area. Over time, such plants tend to take in more and more locally produced goods, gradually establishing the developing country as the "national origin" of its product. Such a trend is sometimes made virtually mandatory by local legislation granting tax or tariff privileges contingent upon steady nationalization.

The setting up of plants to supply neighbouring countries—whether by foreign concerns or by indigenous enterprises—is more likely when there is some integration or common market or mutual tariff arrangement among the economies concerned. This has been a positive factor in the recent acceleration in the pace of industrial development in the Central American Common Market (see table 30) but progress elsewhere has not been very noteworthy. The presence of a potentially dominant member among the would-be participants, the tendency for the resource patterns of neighbouring countries to be more competitive than complementary, and the difficulty of lining up investment plans in a way that would facilitate agreement about joint projects and the distribution of individual projects in relation to combined economies have all contributed towards complicating the efforts of developing countries to promote export-oriented industries.

#### *Domestically oriented industries*

In a market-based economy, the process of economic development tends to create the conditions for a certain amount of spontaneous industrialization. As total income rises, demand is generated not only for increasing quantities but also for a wider range of goods and services. As *per capita* income rises, the demand for basic food-stuffs begins to grow more slowly than the demand for more elaborate goods and services. And as producers respond to these varying rates of growth in final demand, intermediate demand—for the goods and services

<sup>12</sup> These proportions are based on the value of imports into North America, western Europe and Japan from the developing countries in the case of the processed and unprocessed agricultural commodities, on the volume of exports from the developing countries in the case of the metals and ores, and the value of exports from the developing countries in the case of fibres and textiles. See United Nations Conference on Trade and Development, "Commodity survey, 1967" (TD/B/C.1/46), tables 15 and 16.

Table 30. Trade among members of the Central American Common Market,<sup>a</sup>  
1955-1965

(Millions of dollars, except as indicated)

Category of imports	1955	1965 <sup>b</sup>	Percentage of composition		Average, annual rate of increase, 1955-1965 (percentage)
			1955	1965 <sup>b</sup>	
Food-stuffs	6.2	38.3	49	27	20
Beverages and tobacco	0.8	1.7	6	1	8
Raw materials	1.7	4.1	13	3	9
Fuels	0.3	8.3	2	6	39
Oils and fats	0.5	2.1	4	1	15
Chemical products	0.6	20.9	5	15	43
Manufactures classified by materials	1.2	37.2	9	26	41
Machinery and automotive products	0.6	5.5	5	4	25
Other manufactures	0.8	23.8	6	17	40
Total	12.7	142.2	100	100	27

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on *Economic Survey of Latin America, 1965* (United Nations publication, Sales No.: 67.II.G.1); Committee for Economic Development, *Economic Development of Central*

*America* (New York, 1964).

<sup>a</sup> Based on imports of Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua from one another.

<sup>b</sup> Full-year estimate based on data for January-September

needed as inputs in the factories catering to final demand—begins to expand in volume and range. Thus, in the absence of the various handicaps and impediments which in fact do exist in the developing countries (and which are discussed in the following section of this chapter), economic expansion set in motion by a rise in export earnings or an inflow of external resources and a gain in local productivity should lead through a progression of demand increases and changes to the development of a variety of industries serving the domestic economy.

Putting aside again the special obstacles that exist in most developing countries, there are two features of the actual situation militating against such spontaneous development. One is the size of the market in individual developing countries and the other is the nature of their economic relations with the rest of the world. As indicated in chapter I, the developing countries tend to be relatively much more dependent on their trade relations than are the more advanced countries. In some ways, this complicates the pattern of their economic growth, but without such connexions the pace of development would be considerably slower. Indeed, in the case of most developing countries, to become economically "closed" would be to risk virtual stagnation. In most developing countries, the domestic market is just too small to sustain spontaneous development at a tolerable rate.

Even with their extensive trade component, most developing countries remain extremely small when assessed in terms of market potential for new industries (see table 31). Only a handful produce more than \$5 billion worth of goods and services a year and a majority of the countries for which national accounting is available—which includes almost

all the larger entities<sup>13</sup>—produce less than \$1.25 billion.

Nor is the smallness of the total income of many of these countries the only difficult feature of the market. In many cases, the distribution is extremely skew: a small element in the population has incomes as high as or even higher than those found in more advanced countries, while the average income of the great bulk of the population is correspondingly low. These low incomes, moreover, are often scattered geographically in a way that tends to reduce still further their market potential. Where market concentrations do exist, they are often in port cities, almost as accessible to overseas industries as they are to local producers.

In these circumstances, the "spontaneous" growth of industry referred to above is likely to be heavily weighted by, if not confined to, those forms of manufacturing that are strongly market oriented (by the perishability or fashionability of their products, for example) or highly localized (by the high weight-value ratio of their products, for example). In 1963, one-fourth of the value added by manufacturing in the developing countries was attributable to the food-beverage-tobacco group of industries and almost one-fifth to the textile and clothing group. Along with furniture and woodworking and other "light" industries, this food and clothing production accounted for over half of the value added in manufacturing in the developing countries, compared with not much more than a third in the developed market economies.

<sup>13</sup> From the point of view of total production, the only significant omissions are Hong Kong, Indonesia, Malaysia, Republic of Viet-Nam and Singapore.

Table 31. Developing countries: distribution according to gross domestic product, 1965<sup>a</sup>

(Billions of 1960 dollars)

\$5 billion and over	\$2-5 billion	\$1-2 billion	\$0.5-1 billion	Under \$0.5 billion
India	Colombia	Former Federation of Rhodesia and Nyasaland	Dominican Republic	Costa Rica
Brazil	Israel		Jamaica	Nicaragua
Mexico	Nigeria		Kenya	Bolivia
Argentina	Thailand	Ceylon	Mozambique	Honduras
Venezuela	Former French West Africa <sup>b</sup>	Burma	El Salvador	Liberia
Pakistan		Ghana	Former French Equatorial Africa <sup>c</sup>	Paraguay
Philippines	Algeria	Guatemala		Sierra Leone
Iran	Peru	Sudan		Haiti
Chile	China (Taiwan)	Uruguay	Lebanon	Mauritius
United Arab Republic	Saudi Arabia	Congo (Democratic Republic of)	Angola	Guyana
Republic of Korea	Morocco	Syria	Trinidad and Tobago	Togo
	Kuwait	Libya	United Republic of Tanzania	Barbados
		Ecuador	Madagascar	
		Ethiopia	Cameroon	
		Tunisia	Panama	
			Uganda	
			Jordan	

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on data supplied by the Statistical Office of the United Nations.

<sup>a</sup> Countries are arranged in descending order of magnitude of gross domestic product

<sup>b</sup> Former French West Africa includes Dahomey, Guinea, Ivory Coast, Mali, Mauritania, Niger, Senegal and Upper Volta.

<sup>c</sup> Former French Equatorial Africa includes Central African Republic, Chad, Congo (Brazzaville) and Gabon.

The demand for industrial goods is met in part by domestic factories, in part by imports. Between the mid-1950's and the mid-1960's, manufacturing output in the developing countries rose at an average rate of 7 per cent a year. In varying degree, in different countries and different industries, this expansion in output went to fulfil the growth in domestic demand, to replace supplies that would otherwise have been imported, and to be sold abroad. Over the whole range of manufactures, it was the first of these components of demand that predominated: incomes rose at an average rate of 4.5 per cent a year and the demand for manufactured goods presumably rose at an appreciably higher rate.

As implied above, the proportion of factory output going into exports differed markedly from country to country. It was highest in those places where deliberate efforts were made to increase the degree of processing of products previously exported in their primary form. In Pakistan, it may have accounted for an eighth of the growth in manufacturing production, in China (Taiwan) as much as a fifth, and in the Philippines for perhaps 8 per cent.<sup>14</sup> Much

less of Latin American industrial expansion went into exports.

The proportion of the increment in manufacturing output used to displace imports depends on the structure of industry and its growth and the degree of import dependence. In those countries where industrial development has already tended to edge imports out of the domestic market, the scope for further growth at the expense of imported goods is obviously much less than in a newly industrializing country. Thus during the 1950's and early 1960's, the degree of import substitution was much less in such countries as Argentina, China (Taiwan) and Mexico than in Brazil, Colombia, Pakistan and the Philippines. As imports are displaced, the further development of industries has necessarily to depend increasingly on the expansion of domestic demand—or on exports.

For policy purposes, industrial growth as a whole is sometimes too wide a concept to be very useful. Many policies are framed at the individual industry level and here there are quite wide differences in experience. The lowest rate of growth in recent years has been registered by the textile industry. As one of the oldest in the manufacturing sector, the textile industry has shown least scope for import substitution. In Latin America, indeed, the rise in textile production between the mid-1950's and the mid-1960's did not even keep pace with the rise in population (see table 32). It was much more buoyant

<sup>14</sup> These proportions are the estimates of S. R. Lewis and R. Soligo in the article "Growth and structural change in Pakistan manufacturing industry, 1954-1964", *Pakistan Development Review* (Spring 1965); and of S. R. Lewis and A. Claus in "Notes on industrial growth in Taiwan and the Philippines", an unpublished paper presented at the Williams-Harvard Colloquium on Industrialization and Trade Policy, November 1966.

Table 32. Growth of manufacturing production, by major groups and by region,<sup>a</sup> 1955-1966  
(Percentage per annum)

Region	Manufacturing		Food, beverages and tobacco	Textiles	Clothing, footwear and made-up articles	Wood products and furniture	Paper and paper products	Chemicals, petroleum and coal products	Non-metallic mineral products	Basic metals	Metal products
	Total	Light <sup>b</sup>									
Developing countries <sup>d</sup> ..	7.0	5.4	9.3	3.9	....	...	9.9	7.9	7.7	9.9	10.9
Latin America .....	5.5	3.8	7.8	2.3	...	...	7.8	6.7	5.7	8.0	10.1 <sup>e</sup>
Southern and south-eastern Asia .....	8.1	6.7	11.0	4.5	...	...	11.0	8.8	10.1	11.3	12.8
Developed market economies .....	5.3	4.2	5.8	3.4	3.9	3.6	5.5	8.4	4.8	3.4	5.9
World, excluding centrally planned economies .....	5.4	4.3	6.1	3.7	4.1	4.1	5.6	8.3	5.2	3.8	6.1
World <sup>f</sup> .....	6.5	4.8	7.5	4.1	4.8	5.4	5.8	9.3	7.9	5.1	7.8

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Monthly Bulletin of Statistics*, May 1968.

<sup>a</sup> Compound rate of growth between 1955 and 1966, based on indices of industrial production (1963=100).

<sup>b</sup> Food, beverages, tobacco, textiles, clothing, foot-wear, furniture, wood products and miscellaneous manufactures.

<sup>c</sup> Paper, chemicals, petroleum and coal products, non-metallic minerals, basic metals, metal products and engineering.

<sup>d</sup> Countries in which the *per capita* value added in manufacturing in 1958 was less than \$125.

<sup>e</sup> 1955-1965.

<sup>f</sup> Excluding centrally planned economies of Asia.

in the developing countries of Asia where not only was the income elasticity of demand somewhat higher than in Latin America but the local cost structure of the industry—still a rather labour-intensive one—made exports relatively profitable. (The limit on this source of expansion, indeed, was the reluctance of the more advanced countries to see more of their markets served by imports. See chapter V.)

The rate of increase in the food industry was appreciably higher (almost 5 per cent a year) even in Latin America (4 per cent a year). This is not a reflection of a greater response in the demand for food-stuffs as such as income rises, but rather the result of changes in the food industry itself and the forms in which food is in fact purchased. The degree of processing has risen considerably in the developing countries (as in the more advanced countries) especially in those areas in which urban populations have grown most rapidly.

More significant from the point of view of the forms and processes of industrialization have been the sharply higher rates of increase in heavy industry. At over 9 per cent a year, the rate of growth in chemical, metallurgical and engineering industries in the developing countries was considerably higher than that of their lighter industries and than that of the heavy industries in the rest of the world. This reflects in part the maturing industrial structure in a

number of developing countries and in part the development of industries based on favourable resource endowments in the mineral field.

The rate at which the industrial structure matures depends in the first instance on the growth of demand for investment goods and for so-called intermediate goods. In some of the larger and more industrialized of the developing countries, the structure of the manufacturing process has lengthened perceptibly in recent years as new industries have been established to meet the demand for machinery, components and other manufactured inputs for existing factories. In the course of the 1950's and early 1960's, the proportion of total manufacturing output taking the form of investment goods rose to about a fourth in Argentina (from an eighth in 1950) and Mexico (from a sixth) and it was approaching a third in Brazil. The relative importance of intermediate goods also increased; indeed, in the case of Brazil and Mexico by 1965, this category of manufactures had surpassed the output of consumer goods. There were similar changes in India in the wake of development plans that placed particular emphasis on heavy industry: between 1950/51 and 1965/66, the share of investment goods in total manufacturing output increased almost threefold, to about 28 per cent. Smaller and less industrialized countries show the same direction of movement in the composition of output (see table 33).

Table 33. Selected developing countries: change in structure of manufacturing output, 1950-1965  
(Percentage)

Country	Period	Structure of manufacturing sector					
		Early 1950's			Early 1960's		
		Consumer goods	Inter-mediate goods	Investment goods	Consumer goods	Inter-mediate goods	Investment goods
		(Percentage composition of output)					
Argentina	1950-1961	63	24	13	50	25	25
Brazil	1953-1965	48	27	25	34	35	32
Colombia	1951-1962	63	29	8	50	33	17
India	1950/51-1965/66	63	28	10	40	32	28
Mexico	1950-1965	47	37	17	37	39	24
Pakistan	1954/55-1963/64	73	16	11	59	22	19

Source: Centre for Development Planning, Projections and Policies, based on Jaleel Ahmad, "Import substitution and structural change in Indian manufacturing industry, 1950-1966", Memorandum No. 17, Project for Quantitative

Research in Economic Development, Harvard University, August 1966, and S. R. Lewis and R. Soligo, op. cit., pages 94-139, and national sources.

The growth of heavy industry on the basis of favourable resource endowments has in some countries been export oriented rather than in response to the changing pattern of domestic demand. Much of it has involved the erection of beneficiation plants

and refineries for various non-ferrous ores and for petroleum, carried out in many instances by foreign-owned concerns. In some cases, a portion of the output of such plants has remained in the industrial nexus as raw material for metal fabricating or petro-

chemical works. This has happened to some extent in such countries as Chile, Colombia, Iran and Venezuela.

In assessing the scope for the growth of capital goods industries in the developing countries, it has to be borne in mind that very few of these economies

have an annual investment outlay in excess of \$1 billion; the majority invest less than one-fifth of that amount (see table 34). In the absence of special integration or other trading arrangements, a demand of this magnitude does not provide a very solid base on which to build a range of heavy industries.

**Table 34. Developing countries: distribution according to investment, 1965<sup>a</sup>**  
(Billions of 1960 dollars)

\$1 billion and over	\$0.5-1 billion	\$0.2-0.5 billion	\$0.1-0.2 billion	Under \$0.1 billion
India	Colombia	Algeria	Angola	Kenya
Brazil	Philippines	Former French	Ceylon	Bolivia
Argentina	Thailand	West Africa <sup>b</sup>	Uruguay	United Republic of
Mexico	Chile	Ghana	Saudi Arabia	Tanzania
Venezuela	United Arab	Former Federation	Guatemala	Nicaragua
Pakistan	Republic	of Rhodesia and	Dominican Republic	Jordan
Iran	Republic of	Nyasaland	Lebanon	Liberia
Israel	Korea	Kuwait	Congo (Democratic	Costa Rica
	Peru	Libya	Republic of)	Uganda
	China (Taiwan)	Burma	Jamaica	Cameroon
	Nigeria	Iraq	Ecuador	Honduras
		Tunisia	Sudan	Madagascar
		Morocco	Trinidad and	Paraguay
		Mozambique	Tobago	Sierra Leone
			Syria	Togo
			Ethiopia	Guyana
			El Salvador	Mauritius
			Panama	Barbados
			Former French	Haiti
			Equatorial	
			Africa <sup>c</sup>	

Source and foot-notes: See table 31.

### *Major obstacles to industrialization*

That industrial development has not been an autonomous process in most developing countries but in varying degree has been induced by policy measures is a reflection of a number of obstacles other than those associated with the market for manufactured products, namely, the smallness of domestic demand and the difficulty of access to external markets. The prime nature and relative magnitude of those obstacles differ from country to country, but certain common problems tend to recur so frequently that they may be regarded as virtually generic. Included in the category are problems of entering the market in the face of competition from existing suppliers, shortages of the special skills required in industry, shortage of capital and the consequent problem of choosing or adapting available technologies, inadequacies in the infrastructure in the light of the special requirements of industry and the various difficulties occasioned by the scarcity of foreign exchange.

Difficulty of entry has to be overcome by all new enterprises seeking to capture a share of the market served by existing industries. The special feature in the present context is the relative weakness of

the new enterprise and the potential strength of the established concerns that serve the market from their bases abroad. The concept of an "infant industry" is often only too accurate. As indicated above, it is only in the case of highly market-oriented industries or those sheltered by distance or transport costs that the new enterprise in the developing country is likely to find entry easy.

Though differing in intensity from one industry to another, the lack of appropriate knowledge and skills is a pervasive difficulty in most developing countries. As its incidence tends to be greatest at the entrepreneurial level, the development of industry is handicapped at its earliest stage. The task of bringing together the capital and labour in a factory setting is a novel one in many developing countries and it is only as the process of industrialization advances and familiarity with factory discipline spreads that the capacity to organize workers and equipment and the flow of materials into an efficient productive mechanism begins to become available.

While the lack of entrepreneurial ability is the most stifling at the outset, industrial enterprises make exacting claims on many other skills that tend to be in short supply in the developing countries

—both in the managerial field and often even more seriously in the technical field. Though the trend in technology has been towards reducing dependence on some of the old artisan skills, especially in the engineering area, factory operations and maintenance still require a strong corps of qualified technicians.

The shortage of capital that, as indicated in chapter I, is still a major characteristic of the developing countries poses many awkward problems. Taken in conjunction with the need to absorb a rapidly growing labour force, this shortage points to the general desirability of avoiding capital-intensive methods of production, wherever this is possible. Obviously, this problem is not susceptible of any general solution: each case has to be decided on its own merits. As the relative cost of a unit of the end-product turned out by the various available methods of production is a prime consideration, it is important to take the factors in at their proper prices in the developing-country setting. Recent experience suggests that there is a fairly widespread tendency to undervalue capital in this sort of calculation. There is also some tendency to underrate the social losses implicit in unemployment and under-employment of labour. By and large, therefore, there would seem to be a strong case for looking more closely into the possibilities of adapting the technologies elaborated in the relatively capital-rich labour-short industrialized economies for use in countries with completely different resource availabilities.

The capital intensity of many of the modern methods of industrial production tends to handicap developing countries not only because of their lack of capital and their need to create employment opportunities as an essential element of their diversification but also because of the scale of operation implicit in many of these techniques. Except in those cases where—in the light of resource endowment, for example—there is a good possibility of establishing a competitive export-oriented industry, the main need in most developing countries is for relatively small-scale plants, capable of expansion as local demand grows but not forced by market conditions to operate at much below optimum rates.

The impact of recent technological developments on plant size has been mixed. In general, most of the innovations have favoured larger-scale operations; some indeed—including automation and various means of conserving heat or lessening movement by closer integration of different phases of production—yield their advantages only if the scale of operations to which they are applied is much above earlier levels. Others, however—including the evolution of relatively cheap electric motors to provide individual machines with their own motive force and the improvements in the efficiency of relatively small electric smelting furnaces—have made certain types of large-scale operations less necessary. In

some areas, the proliferation of technological choices has made the task of decision making in the less industrialized countries with no great cadres of consultant engineers at their disposal much more complicated.

The problem of the size and capital intensity of specific industrial investments is aggravated by another contemporary phenomenon, namely, the accelerated tempo of change. The faster pace of technological advance is tantamount to a speeding up of the process of obsolescence. This adds to the handicap of capital-poor countries and makes it even more necessary for them to scrutinize the pattern and forms of investment.

In many cases, these problems have to be faced first in the private sector, which in most developing countries is largely responsible for manufacturing production. Government concern is not confined to the implications of private decisions for the economy as a whole, however, or even with ways and means of influencing those decisions (as discussed in the following section). In most developing countries, government involvement is much greater, both directly in the industrial sector and indirectly in the provision of so-called social overhead capital which constitutes the physical framework within which the industrial sector operates.

The relative inadequacy of the infrastructure is, on the one hand, a major handicap for industry and industrial growth in most of the developing countries and, on the other hand, the main area in which the Government itself has to come to grips with the problems of capital intensity, size and timing of investment. The Government is concerned in the provision of many forms of infrastructure but those of most immediate importance to industrial development are power and transport and communication. Shortcomings in the power system and in the facilities for moving goods around can constitute a serious cost-raising and efficiency-lowering obstacle to industrial activities. And in these areas Governments often face awkward choices.

Thermal stations may involve lower capital costs than hydro stations and give power more quickly and more flexibly—but only at appreciably higher operating costs. Roads may similarly yield a more flexible transport nexus more quickly than railways but prove more costly to maintain and less adequate to move bulk loads. As indicated earlier in this chapter, investment in local tube wells may have important cost and speed advantages over the canalization of hydro over-spill. It may be quicker and cheaper to expand a lighter fleet than build a deep-water berth for ocean-going ships, but the slower and costlier movement of cargoes may add appreciably to local prices and handicap the expansion of exports.

Nor are decisions about these matters merely marginal. Basic social overhead investment accounts for around one-fourth of gross capital formation in many developing countries (see table 35) and for

around one-third of gross fixed capital formation. And investment in electrical power plant is one of the most rapidly increasing forms of capital formation. Electricity production rose at an average rate

**Table 35. Selected developing countries: infrastructure components of capital formation, average 1960-1963**

(Percentage of gross domestic product)

Country	Total capital formation	Construction	Electricity, gas and water	Transport, storage and communication	Social overhead capital	
					Total	As a percentage of capital formation
China (Taiwan)	19.6	0.1	1.8	2.5	4.4	22
El Salvador <sup>a</sup>	12.8	0.3	0.9	3.6	4.8	38
Israel	29.0	.	0.9	4.7	5.6 <sup>b</sup>	19 <sup>b</sup>
Jamaica	19.9	1.0	0.5	2.3	3.8	19
Malawi <sup>c</sup>	16.9	0.2	1.6	2.5	4.3	25
Mauritius	18.1	0.3	1.9	3.2	5.4	30
Philippines	13.5	0.2	1.1	2.7	4.0	30
Republic of Korea	13.2	0.5	—	3.2	3.7	28
Southern Rhodesia	16.9	0.4	2.2	3.0	5.6	33
Tanganyika <sup>d</sup>	11.9	0.7	0.5	2.5	3.7	31
Thailand	19.8	1.5	1.3	3.7	6.5	33
Tunisia	21.1	0.3	0.6	2.3	3.2	15
Zambia	20.3	0.3	1.4	2.0	3.7	18

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on *Yearbook of National Accounts Statistics, 1966* (United Nations publication, Sales No.: 67.XVII.14).

<sup>a</sup> Fixed capital formation.

<sup>b</sup> Partial; data on investment in construction not available.

<sup>c</sup> Average for 1961-1963.

<sup>d</sup> Average for 1960-1962.

of 10 per cent a year in the first half of the 1960's (see table 36) and rates of utilization of installed capacity were generally higher than they tend to be in more advanced countries where weather, patterns of industrial off-take and practice in respect of standby equipment and plant maintenance make for a rather low load factor.

Lags in generating capacity such as have occurred in a number of developing countries in recent years—Brazil and the United Arab Republic, for example—necessitate the rationing of power in ways that may inconvenience industrial as well as residential users. Building plant ahead of requirements, on the other hand, obviously tends to tie up capital in a wasteful fashion. As such investment tends to be particularly lumpy—that is, capacity is increased by a series of discrete steps—timing problems become extremely important, especially in the early phase of industrialization when the base capacity is relatively small and increments are proportionately large.

Much of this investment has a high import content, and shortages in foreign exchange supply tend to exercise a major constraint not only on the pace of development but also on the form. Where choices exist, production techniques that entail the smallest claim on foreign exchange tend to be given preference. In the case of most industrial investments, this consideration affects both the original plant and equipment and the subsequent operating inputs.

Though, as indicated above, a significant proportion of industrial expansion is at the expense of imports—that is, the end product of the new factory serves a demand that would otherwise have been met by imports—yet new facilities often continue to depend on imports of a range of producer and intermediate goods to a much greater extent than has often been assumed by Governments in the formulation of their industrialization policies. When the balance of payments imposes the most stringent of the constraints on growth, this type of industrial development can also prove wasteful of capital. Plants will tend to have a poor capacity-utilization record not because of any shortfall in demand for their product but because of supply difficulties in critical inputs.

Where capital itself is in such short supply, inefficient use of it points to a serious defect in development strategy. The explanations for this differ from case to case, but two common features of recent experience are under-emphasis of the export sector and over-emphasis of individual projects out of the context of the over-all investment pattern. The former tends to be aggravated by measures designed to promote industries that will displace existing imports, with insufficient regard to the fact that those industries may create a demand for an entirely different range of imports. The project approach to development has often been accentuated by the

Table 36. Developing countries: installed capacity and production of electric energy, 1960-1965

Country	Installed capacity, 1965		Energy production, 1965			Capacity utilization, <sup>b</sup> 1960-1965 <sup>c</sup>	Average annual increase in production, 1960-1965 <sup>c</sup>
	Total <sup>a</sup> (Thousands of kilowatts)	Hydro	Total <sup>a</sup> (Millions of kilowatt-hours)	Hydro	Kilowatt-hours per capita <sup>a</sup>		
Afghanistan	61	48	180	166	14	29	14
Algeria	500	228	1,096	400	94	11	-4
Angola	334	259	318	...	62	10	17
Argentina	5,050	373	14,979	1,238	670	33	7
Bolivia	160	93	534	421	150	37	4
Brazil	7,411	5,391	30,128	25,515	373	51	6
Burma	252	84	570	280	24	23	7
Cambodia	37	—	81	—	13	30	62
Cameroon	170	152	1,148 <sup>d</sup>	1,063 <sup>d</sup>	220	73 <sup>d</sup>	5 <sup>d</sup>
Central African Republic	8	7	21	21	16	22	21
Ceylon	152	60	428	338	38	35	7
Chad	9	—	18	—	54	26	25
Chile	145	710	6,131	3,954	714	47	6
China (Taiwan)	128	...	6,627	...	533	55	12
Colombia	1,469	793	5,916	3,721	338	45	12
Costa Rica	181	112	618	531	431	45	7
Cyprus	102	—	355	—	598	36	9
Dahomey	8	...	15	...	7	21	17
Ecuador	182	67	572	249	111	34	8
El Salvador	115	...	418	...	142	40	11
Ethiopia	119	73	208	196	11	17	18
Gabon	15	—	42	—	91	31	16
Gambia	5	—	8	—	25	17	11
Ghana	410	256	528	107	68	29	7
Guatemala	114	...	480	...	108	45	11
Guyana	98	...	212	...	337	25	23
Haiti	28	...	71	...	17	25	4
Honduras	58	...	150	...	66	31	11
India	8,397	3,331	33,129	14,807	70	44	13
Indonesia	391	188	1,548	...	16	44	10
Iran	790	233	2,250	...	94	27	25
Jamaica	186	...	798	...	446	40	10
Kenya	160	28	328	198	35	32	8
Laos	12	—	16	—	6	17	18
Lebanon	356	198	765	505	318	27	13
Liberia	116	4	278	17	260	30	25
Libya	70	—	157	—	101	29	11
Madagascar	82	29	152	84	24	20	9
Malawi	14	1	52 <sup>d</sup>	4 <sup>d</sup>	13	35	13
Malaysia	525	138	2,247	587	237	47	13
Mauritius	97	16	103	64	139	11	13
Mexico	5,240	2,327	17,253	8,609	404	38	10
Morocco	37	292	1,282	1,159	96	35	5
Mozambique	209	66	242	...	35	13	12
Nepal	8	3	14	8	14	20	6
Nicaragua	134	59	311	204	188	31	11
Nigeria	362	21	1,177	132	21	38	17
Pakistan	1,074	348	3,962	1,839	39	36	22
Panama	86	...	378	...	306	47	13
Peru	1,148	680	3,839	2,625	330	38	8
Philippines	1,085	291	4,959	1,509	183	48	13
Republic of Korea	947	215	2,966	750	107	45	14
Republic of Viet-Nam	285	...	522	58	32	28	12
Senegal	71	...	204 <sup>d</sup>	—	59	29	10
Sudan	76	...	180	...	13	27	19
Syria	243	...	616	...	116	31	11
Thailand	560	—	1,406	—	46	28	19
Togo	18	2	34	3	21	23	33
Tunisia	213	28	494	42	113	28	9
Uganda	152	122	572	572	76	41	8
United Arab Republic	1,335	351	5,106	1,670	185	37	16

Table 36. Developing countries; installed capacity and production of electric energy, 1960-1965 (*continued*)

Country	Installed capacity, 1965		Energy production, 1965			Capacity utilization, <sup>b</sup> 1960-1965 <sup>c</sup> (Percentage)	Average annual increase in production, 1960-1965 <sup>c</sup>
	Total <sup>a</sup> (Thousands of kilowatts)	Hydro	Total <sup>a</sup> (Millions of kilowatt-hours)	Hydro	Kilowatt-hours per capita <sup>a</sup>		
United Republic of Tanzania	71	41	213	178	20	38	5
Upper Volta	11	—	21	—	4	25	21
Uruguay	477	225	1,724	1,267	681	39	8
Venezuela	1,977	387	8,241	1,369	956	34	12
Zambia	261	50	666 <sup>d</sup>	276	177	30	—4

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on *Statistical Yearbook, 1964, 1965 and 1966* (United Nations publications, Sales Nos.: 65.XVII.1, 66.XVII.1 and 67.-XVII.1) and United Nations, *Monthly Bulletin of Statistics*.

<sup>a</sup> For some countries, data are for an earlier year.

<sup>b</sup> Ratio of output in kWh to the product of installed capacity and maximum annual operating time (8,750 hours).

<sup>c</sup> In some instances, based on a shorter period.

<sup>d</sup> Consumption.

way in which external resources have been made available in loans or grants linked specifically to designated undertakings. In view of the foreign exchange constraint, these aid allocations often tend to exercise an influence on the over-all pattern of investment out of proportion to their actual magnitude, tying up local capital and other resources to the projects commanding the crucial foreign exchange support and to the associated investment immediately connected with them.

#### *Industrialization policies*

As suggested at the beginning of this chapter, industrialization is an important element in all economic development strategies. Most government policies are specifically designed to foster industrial development, either through direct involvement or through measures aimed at mitigating the impediments described above and thus inducing the expansion in manufacturing that is not taking place spontaneously in the private sector in the wake of the evolution of demand.

The most direct involvement of Governments is through the setting up of manufacturing corporations in the public sector. This has been done in many developing countries, sometimes because of the strategic nature of the industry—either from the point of view of national defence or in terms of the central role envisaged for it in future programmes of investment, sometimes because of the inability of the private sector to provide the necessary resources without extensive official support. Experience with such public-sector industries has been varied. By economic criteria, they have been most successful when freed from the need to serve political or social ends: when saddled with employment policies or price policies that are out of line with market requirements their efficiency has usually tended to suffer.

In varying degree, Governments have also tailored their investment in social overhead capital to serve the requirements of an expanding industrial sector. As suggested in the preceding section, capacity has

not always kept pace, especially again when price and employment policies have been shaped by other than economic criteria. The most specifically manufacturing-oriented infrastructure provided in the developing countries has been in the form of industrial estates—factory shells serviced with power, water and transport and available for lease by private concerns. Pre-prepared units of this nature seem to have been most helpful—in Singapore, for example—in the case of small-scale factory activities carried on by individual or corporate entities that are too poorly capitalized to devote funds to building.

Governments have also helped by a certain amount of institution building in the capital market. Industrial development corporations actually engaging in investment in manufacturing and industrial finance corporations acting as a channel through which funds can flow into the manufacturing sector have been established in many developing countries. As pointed out in chapter III, they have helped to familiarize those operating on the (generally rudimentary) capital markets of the countries in question with the problems of industrial financing, fulfilling a function not usually performed by the commercial banks and other entities handling savings.

Governments have also sought to alleviate some of the scarcities in the field of industrial skills. Some attempts have been made to expand facilities for technical and business training and to adapt ordinary educational curricula to the needs of an industrializing society. Improvements have also been made in the arrangements through which developing countries can obtain specialized industrial expertise from abroad. Forms of management contracts have been elaborated under which foreign teams can operate industrial plants on mutually acceptable terms, training local personnel on the basis of a time-table designed to enable them to take over the various functions at the end of the contract.

Apart from this more or less direct involvement in the industrialization process, Governments have adopted a wide array of incentive measures designed

to encourage the private sector to take a greater interest in manufacturing. Some of these measures operate through the fiscal system, offering tax concessions—lower rates or “holidays” or the accelerated writing down of capital expenditure—to entrepreneurs who invest in designated industries or designated places. But the basic inducement in almost all developing countries has been protection from the competition of external supplies.

It has been with the help of such protection that local entrepreneurs have been able to strengthen their position as suppliers of the domestic market. When the protection has been in the form of a moderate tariff on the imported item, the conquest of the domestic market by the local industry has had to be achieved on the basis of quality and price not very far out of line with those obtaining elsewhere. The more secure the protection, the further have domestic supply conditions been able to depart from international standards. In the circumstances of much of the post-war period, the degree of protection has been very high in many of the developing countries because of the pressure to restrain imports in order to conserve foreign exchange.

In some cases a mutually reinforcing system has tended to develop. Severe restraints on imports imposed for balance of payments reasons had the effect of turning over to local producers large segments of the domestic market. When, for whatever reason—smallness of scale, lack of capital, inadequacy of plant or any of the other possible handicaps discussed earlier in this section—a relatively high-cost product resulted, it helped to set in motion, or to accentuate, the upward movement of price and cost levels that has come to characterize many of the developing countries in recent years. Such increases in domestic prices were inimical to exports, and though counter-vailing action was taken from time to time—most notably by exchange rate devaluation—the general effect was a contractionary one as far as the international trade of the developing countries was concerned.

The protective system that emerged from the various measures adopted to conserve foreign exchange was seldom a flat one. In most developing countries, external supplies were graded in a hierarchy of essentiality and the tariff or quota control was applied with increasing stringency down this essentiality scale.<sup>15</sup> Domestic producers thus found

<sup>15</sup> In Brazil, for example, the import control system of the early 1950's granted free admittance to essentials such as drugs, insecticides and fertilizers; high priority was granted to such goods as fuels, basic food-stuffs, cement, paper, printing equipment and mining machinery; lower priority was accorded to other machinery (though, within this category, machinery for capital goods industries and essential consumer goods industries was generally favoured); the remaining imports—of non-essential goods—were severely restricted or completely prohibited.

themselves with a share of the internal market that ranged from a very low proportion in the case of high-priority items (mostly capital goods and essential raw materials) to virtually the whole in the case of unimportant and luxury consumer goods. The protective structure was usually modified in accordance with the resource availabilities and the production potential of the country concerned, but its general effect was to encourage a broad horizontal pattern of domestic industries catering chiefly to the consumer. In some cases, it was also modified by systems of excise taxes on finished consumer goods, by systems of domestic investment licensing and by systems of rationing scarce capital goods. This tended to deter the establishment of facilities to produce the luxury goods that import restraints had made so scarce and profitable, but it did little to alter the generally lateral configuration of industry.

As indicated above, the expansion of industrial activity of any kind generates a demand for intermediate products, so that the depth of the manufacturing structure was in fact increasing during this period, especially in those countries that had already attained a relatively high degree of industrialization. Also, with the persistence of foreign exchange difficulties and the exhaustion of the list of low-priority items whose importation might be cut or eliminated, it proved necessary to extend the protective effect of high tariff or import control to more essential items, including capital goods. Thus in some countries, the shape of the protective system tended to change and with it the industrial structure it supported. While becoming steadily more vertical with the growth of industries producing intermediate and investment goods, the manufacturing complex in these countries has not yet outgrown its high-cost heritage.

As the developing countries approach the 1970's, their industrial status covers a wide spectrum from primitive to highly sophisticated. Some countries are still far from the stage at which the more developed were when their post-war import-substitution phase began. By maintaining a better balance in their economies—and in particular by preventing any serious lag in domestic agriculture on the one hand and their export-earning potential on the other—the countries that are at an early stage of industrialization may be able to avoid the policies that have led others to a high-cost structure and a chronically precarious balance, both internal and external. These latter countries will have to make a major effort to raise their industrial efficiency—by integration into units of a more viable size, by streamlining employment practices and by adapting modern technology more appropriately to domestic needs and resource endowments.

## Chapter III

### THE MOBILIZATION OF HUMAN AND FINANCIAL RESOURCES

The output of an economy in terms of goods and services and other forms of consumer satisfaction depends on the quantity and quality of the resources that are put into it. In the developing countries, there are three key forms of input governing the pace of economic development. They are the size and qualifications of the working force, the margin of resources left over after consumption needs have been met, and the supply of complementary goods and services from abroad.

Each of these resource flows has its own constellation of problems affecting its efficiency and its deployment in the development process. And, to some extent, each can be tackled separately. But in the planning of a development strategy, it is their inter-relationship that provides the principal guide to policies and priorities. A country's capacity to save is directly affected by its rate of population growth; its ability to provide employment is related to the rate and pattern of investment; its capacity to invest depends not only on its rate of savings but also on its ability to import the necessary capital goods; its ability to increase output, and hence savings, is strongly influenced by the knowledge and skills possessed by its working population.

Hence, though for purposes of exposition the discussion that follows deals successively with the problems of human resources, savings and export earnings as they affect the course of economic development, the developing countries have to face up to them simultaneously in the context of the production and productivity problems discussed in the preceding chapter.

#### HUMAN RESOURCES

The volume and quality of human resources exercise a major influence on the course of economic development in the developing countries. A small population has less opportunity to practise subdivision of labour than a large one; it is the main determinant of the size of the local market and hence of the structure of domestically oriented production. A poorly educated and unskilled population is likely to have a low productivity.

Development strategies have to take into account not only the size and productiveness of the population

but also its rate of increase. Here the problem in recent years has stemmed chiefly from an acceleration in growth rates brought about by a decline in death rates, especially infant mortality rates. This has resulted in an increase in dependency ratios, the diversion of resources into consumption and into social overheads of low immediate benefit to production, and greater difficulty in adequately equipping the expanding labour force with complementary factors.

Most developing countries have consequently experienced high and increasing rates of unemployment, and the shortage of appropriate skills—which in varying degree is universal in the developing world—tends to aggravate the situation. As the bulk of the increase in the labour force has emerged in the agrarian sector, one result has been widespread agricultural under-employment. Though industrial development has opened up many job opportunities, thereby raising average labour productivity, it has also tended to encourage the less purposeful movement of workers—often the more able and enterprising—from rural to urban areas, with detrimental results for both. The rural areas lose active and vigorous people while in the towns, a new form of under-employment, in offices and in the services sector in general, emerges.

As a result of these trends, the developing countries face three most challenging problems in the field of human resources. The first is to restore and maintain the balance between the growth of population and the expansion in all the other resources on which economic development and welfare depend. The second is to raise the standards of knowledge and skill of the population as a whole, and of the working force in particular, so that productivity can be increased to permit a higher rate of growth in incomes and in savings and investment. The third is to multiply useful employment opportunities by mobilizing existing resources as effectively as possible and organize them into productive combinations, thereby first stabilizing the degree of under-employment and then reducing it.

#### *Population policies*

The average annual increase in developing country population rose from about 2.2 per cent in the 1950's

to 2.5 in the first half of the 1960's, and the present trend is still upward. This means that about half the rate of growth in total output in recent years has been used to sustain more people rather than raise the level of living of those who produced the output. Thus the difficulty of saving and of increasing the rate of capital formation has not been greatly eased, while a greater investment effort is required in order to maintain the *per capita* level of equipment.

In most developing countries, it takes an increase of around 4 percentage points in investment rate to achieve a 1 per cent expansion in total production. A reduction of 1 per cent in the rate of growth in population would thus achieve the same gains in *per capita* production as a 4-point increase in investment ratio. Since, as indicated in chapter I, most developing countries have investment ratios of less than 15 per cent, and the average investment ratio has risen by only about 1 point in the ten years between the mid-1950's and the mid-1960's, such a gain would represent a considerable expansion in development potential.

The reason for the sudden and rapid acceleration in rates of population growth that has characterized the developing world in the post-war period is a steep decline in mortality rates. In many developing countries, these rates have been lowered to within the range common in the more advanced countries, at least when measured on a crude basis.<sup>1</sup> Birth rates, however, have changed hardly at all: they continue to be above 40 per 1,000 in most developing countries (see table 37). It is this failure of birth rates to adjust rapidly enough to the reduction in death rates that lies at the root of the present upsurge in numbers and is the main point of attack in current population policies.

National population policies designed to moderate the rate of natural increase are a very recent phenomenon. Before 1960 only two countries in the developing world<sup>2</sup> had an official policy of family planning for the purpose of lowering the birth rate: India introduced it in 1952 and Pakistan in 1955, both in connexion with their first five-year plans. In 1961 the Republic of Korea introduced family planning, and since 1964 a number of other countries—including Ceylon, Jamaica, Kenya, Malaysia, Morocco, Singapore, Tunisia, Turkey and the United Arab Republic—have adopted policies favouring birth control. The twelve countries with official family planning

policies designed to curb population increase contain more than 40 per cent of the population of the developing world.

The increased concern of Governments is reflected in the expanding sums budgeted for family-planning programmes. By 1965, the Republic of Korea had raised the annual budget for its programme to the equivalent of \$1.5 million, or 5 cents *per capita*, five times the 1961 average. In Pakistan public funds for family planning were raised from the equivalent of \$6 million (or 1.25 cents *per capita* per year) in the second five-year plan (1960-1965) to \$58 million (or 11 cents *per capita* per year) in the third five-year plan (1965-1970). Similarly, public expenditure for the programme in India increased from less than \$5 million (or 0.25 cents *per capita* per year) in the second plan (1955-1960) to \$306 million (or 10 cents *per capita* per year) in the fourth plan (1965-1970).

The spread of family planning is not dependent upon an explicit national policy; neither does the existence of such a policy mean that family planning will be widely adopted. Thus, there are a number of developing countries in which birth control programmes are carried out on a wide scale with support and encouragement from the Government, even though there has been no official declaration of a family-planning policy. This is the case in China (Taiwan)—where family planning has been publicized on a voluntary basis since 1954—and on a smaller scale in Chile, Guatemala, Hong Kong and Venezuela.

Though it is not yet possible to conclude that family-planning programmes have achieved their avowed objective of reducing birth rates, there are some hopeful indications. The aim of the present Indian family-planning programme is to bring down the average birth rate for the whole country from 41 per thousand in 1965 to 25 per thousand in 1975; in the state of Madras the birth rate had declined to 33 per thousand in 1967. In two experimental areas in the Republic of Korea the birth rate declined from 42 per thousand in 1962 to between 29 and 30 per thousand in 1964. In China (Taiwan), where the programme was also intensified in the 1960's, the birth rate fell from 42 to 33 per thousand between 1958 and 1966. In Hong Kong, the birth rate dropped from 37 per thousand in 1958 to 25 per thousand in 1966.

Among the main difficulties so far encountered are the slowness of social acceptance (especially among rural groups), lack of a safe and cheap method of contraception (later partly overcome), shortage of trained personnel (particularly women doctors) and the administrative problems of a

<sup>1</sup> When allowance is made for the differences in age structure, the mortality experience of developing countries compares less favourably with that of the high-income countries, though much more favourably than it did a generation ago.

<sup>2</sup> Mainland China is believed to have adopted a policy of birth control as early as 1953; see *1967 Report on the World Social Situation* (United Nations publication, Sales No.: E.68.IV.9), p. 44.

Table 37. Distribution of crude birth rates, by country, 1966 or most recent year<sup>a</sup>

(Births per 1,000 population)

Country group	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50 and over
Developing countries				Hong Kong Puerto Rico	Ceylon Chile China (Taiwan) Peru Singapore	Colombia India Jamaica Mauritius Pakistan West Malaysia	Brazil Cambodia Congo (Demo- cratic Re- public of) Costa Rica Guatemala Guyana Indonesia Mexico Panama Uganda United Arab Republic Venezuela	Algeria El Salvador Jordan Morocco Republic of Korea Tanganyika Thailand Tunisia	Ghana Nigeria Philippines Sudan
Developed market economies . . . . .	Japan	Australia Austria Belgium Denmark France Germany (Fed- eral Republic of) Greece Italy Netherlands Norway Sweden Switzerland United Kingdom United States	Canada Ireland New Zealand						
Centrally planned economies . . . . .	Bulgaria Hungary Romania	Czechoslovakia Eastern Germany Poland Yugoslavia		Albania China (mainland)					

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Population and Vital Statistics Report*, data available as of 1 January 1968 (Statistical Papers, Series A, vol. XX, No. 1 (ST/STAT/SERA/831)).

<sup>a</sup>Data are for 1965 in the case of Norway and a number of developing countries; for a few developing countries, the most recent data relate to an earlier year.

Data are based on complete birth registration in all developed market economies (except in the case of the African population of South Africa for which the 1960 census results were used) and in all centrally planned economies (except mainland China) and in some developing countries (except those in which only incomplete registrations or sample surveys are available).

widespread organization<sup>3</sup> (especially if much rural territory is covered).

While field studies have shown that the will to limit family size exists, people require reassurance and evidence of community approval of a decision to practise birth control. To meet this need in India, attempts were made to enlist the active participation of voluntary bodies, particularly women's organizations and leadership groups. In the Republic of Korea, the programme was introduced in the experimental areas in stages: it was first explained to the township and village chiefs to win their confidence and co-operation; these chiefs then invited the local opinion leaders to a conference, where the field supervisor explained the programme and introduced personnel; at public meetings—usually at night, when the villagers could attend—films, lectures, slides and leaflets on family-planning methods were presented to audiences of men and women, and the field workers assigned to the village were introduced; only then were the educational and clinical services launched; the former included teaching sessions and meetings for groups of ten to fifteen women, arranged by the village leaders in co-operation with the family-planning workers.

The experience so far accumulated in developing countries suggests that the most rapid progress can be made if the programme is addressed first to people who are already motivated. This may mean widespread work in motivation and early concentration of action in urban areas where people can be more easily reached, both by the various media of communication and by field workers, and where medical support is more readily available. Saturation has rarely yielded results commensurate with the costs: if even a small proportion of the population is persuaded, word-of-mouth diffusion of ideas and of knowledge regarding devices for controlling conception may spread the desired practices quite rapidly with relatively little official expenditure. The mere setting up of clinics has seldom been effective; it has been necessary to take the message to the people in an active fashion, working wherever possible from within the community by way of opinion leaders,

<sup>3</sup> In India the stepping up of the programme in the fourth plan was accompanied by a major reorganization. A Committee of the Cabinet—subsequently presided over by the Prime Minister—was constituted specifically for family planning, and in 1966 a new Department of Family Planning was created in the Central Government. The states have their own family-planning cabinet committees and the districts their own family-planning bureaux. Under each district bureau, there are urban and rural family-planning centres and subcentres. Finally, to ensure close co-operation between the state and Central Governments, and to review progress, exchange experience and evolve new policies, there is a Central Family Planning Council on which the Union Minister for Health and Family Planning and others prominently connected with family planning work as members. In order to mitigate the shortage of the desired clinical personnel, the Central Government has offered scholarships to women medical students on condition that they serve in the family-planning programme for an equal period after graduation.

especially in rural areas. No one type of programme has been manifestly superior; an experimental approach seems called for. Providing the objective is clearly defined and consistently pursued in motivational work through the mass information media, the practical programmes are best developed on a pragmatic basis, drawing on successive experiments and experience.

#### *Education policies*

Raising the quality of the population as producers of goods and services is an essential element in any economic development strategy. Realization of the need to increase workers' productivity has tended to change the emphasis of educational policy: education has come to be regarded less as an end in itself—a welfare-enriching consumer service—and more as a means of raising the effectiveness of workers as participants in the development effort.

The difficulties of improving the educational system along these lines have stemmed from a number of features characterizing most of the developing countries. The most adverse has been the low existing level of literacy and of the skills needed in a diversifying economy. The inertia of traditional educational institutions has also been a handicap in many developing countries. The recent upsurge in population, and particularly of the school-age component, has greatly complicated the task of raising and altering standards. The duration of formal education has also added to the problem; manpower budgeting has to be carried out within the period set for the development plan—around five years in most cases—and this has often weakened the link with educational policies which tend to have a more distant time horizon. The rapid changes in technology and the transformations being attempted in many developing countries also add to the difficulty of equipping the school-going group with the skills that will in fact be needed by the time its members enter the economy as workers.

Expenditure on education and the number of children provided with at least some formal schooling have both risen steadily in the post-war period. It is estimated by the United Nations Educational, Scientific and Cultural Organization (UNESCO) that in the course of the 1950's, the number of literate persons in the developing world rose by about 2.5 per cent a year. This reduced the illiteracy ratio from 44 per cent to 39 per cent and held the absolute number of illiterates more or less constant. The number of children enrolled in primary schools rose appreciably faster—at just over 3 per cent a year between 1950 and 1963—while the enrolment in secondary and higher education more than doubled. By the beginning of the 1960's, many Governments in the developing countries were spending more than a fourth of their current budgets on education.

Yet both the efforts and the results were unequal and less than satisfactory. The rate of increase in the proportion of the population actually attending school ranged from near zero in Malawi and Nigeria to over 10 per cent a year in Ghana, Iraq, Morocco, Republic of Viet-Nam and Sudan. As a proportion of the national income in the early 1960's, public expenditure on education ranged from less than 2 per cent in Guatemala, Nicaragua, Pakistan and Republic of Viet-Nam to over 6 per cent in Cuba, Iraq, Israel, Libya and Republic of Korea (see table 38). And with the sharp acceleration in the increase of school-age population, even the average achievement fell behind needs: the number of illiterates rose significantly in the first half of the 1960's. Moreover, the shortage in technical and administrative cadres and in many of the middle and high-level skills required in the economic development effort tended to become more acute.

In consequence of these failures and inadequacies, education policies have come under critical enquiry in recent years; new objectives have been adopted and a new interest kindled in experiments which might improve the quality of manpower at minimal cost. The new objective includes a target for educational expenditure of 4 per cent of gross domestic product and a general intention to integrate the form and content of educational activities more closely with economic development needs.<sup>4</sup> One result has been the emergence of the concept of "functional literacy" tied in with vocational training and the provision of jobs in which the ability to read and write bears immediate fruit in performance. Another result has been an increase in the emphasis on middle-level education and technical training.

The new approach to literacy is essentially a more discriminating one. Instruction would tend to be focused first on groups whose desire or need for literacy was greatest. And it would be an integral part not only of the educational system but also of the plan for economic and social development. The emphasis would tend to be more social and less personal than in the earlier campaigns for universal literacy for its own sake. The effort would tend to be concentrated more on areas of economic expansion.

Experimental projects based on this new selective approach to illiteracy are now in progress in seven countries with the help of the United Nations Development Programme. The aim is to produce, in five years with an expenditure of \$30 million,

up to 1.5 million literates who are visibly more productive than they would have been otherwise. In each project literacy work is an integral part of the economic and social development plan. In Algeria the programme is concerned with the agricultural sector and two important industrial centres. In Venezuela, the project is linked to the development of the hydroelectric, mining and forestry resources of one state, and is a part of rural migration and intensive urbanization programmes in another. In Iran, it is a part of a development programme in a region in which public works investment and the modernization of agriculture were both handicapped by the illiteracy of the local population.

Besides these exercises in functional literacy, many experiments are under way in the field of primary education proper. Some of these represent a sharp break with traditional school systems and policies. In Iran, for example, the Government has made a strenuous effort to narrow the gap between urban and rural facilities which has contributed to the backwardness of agriculture. In 1962 about 89 per cent of school-age children in the cities were enrolled in elementary schools, but only 43 per cent in rural areas. To deal with the problem of providing primary education to the 50,000 villages which were too scattered and inaccessible for the establishment of ordinary schools, the Government set up an "Army of Knowledge" consisting of secondary school graduates among regular conscripts who were required to spend fourteen to eighteen months of military service teaching in rural schools. The first four months of training included, along with military subjects, instruction in education, classroom management and methods of teaching, as well as in sanitation, first aid, agricultural extension, rural scouting, community development and village laws. The literacy corpsmen were made responsible for the teaching of adults as well as children, and for leading the villagers in various social and developmental activities. At the end of his fourteen months' service the teacher was allowed to apply to enter the regular teaching profession, subject to a further three years of service in a rural school. Between 1962/63 and 1965/66 more than 8,000 literacy corpsmen became permanent teachers in this way, while the number of pupils enrolled in elementary schools throughout the country increased by 48 per cent—from 1.7 million to 2.5 million.

Another innovation in the field of education is the Barrio (Village) High School Movement (BHSM) in the Philippines. The movement was a private one, prompted by a 1960 survey which showed that only 18 per cent of the juveniles in the 13-17 age bracket were enrolled in secondary schools, while the rest, numbering almost 2 million, were not attending school. The BHSM sought to bring secondary education to the village by establishing in the barrio an extension or branch of an

<sup>4</sup> This reappraisal was the subject of meetings of Ministers of Education of Latin American countries (in Santiago in 1962), of Asian countries (in Tokyo in 1962) and of African countries (in Paris in 1965), and also of a world Conference on the Eradication of Illiteracy convened by UNESCO in Tehran in 1965. On the basis of national income, the target is nearer 5 per cent, a proportion attained by relatively few of the developing countries in the early 1960's

Table 38. Developing countries: public expenditure on education in 1962 and growth in school enrolment ratio, 1955-1963

Country <sup>a</sup>	Public expenditure on education as percentage of national income, 1962 <sup>b</sup>	Annual rate of growth in school enrolment ratio, 1955-1963 <sup>c</sup>				
		Total	First level	Second level <sup>d</sup>		Third level <sup>e</sup>
				General	Vocational	
Israel	8.4	3	2	8	9	3
Cuba	7.8	5	4	12	10	-3
Republic of Korea	6.8	2	2	—	2	4
Libya	6.7	9	8	8	11	51
Iraq	6.6	11	10	14	12	16
Sudan	5.6	11	9	21	21	18
United Arab Republic	5.6	4	4	—	17	7
West Malaysia	5.3	3	2	9	-3	27
Syria	5.2	4	4	5	13	19
Kenya	5.1	7	6	—	13	9
Ceylon	5.0	3	—	3	—	8
Venezuela	4.8	7	6	13	19	18
Peru	4.8	4	3	9	11	10
Costa Rica	4.8	3	3	6	8	7
Morocco	4.7	11	11	19	9	18
Panama	4.4	2	1	6	6	9
Ghana	4.3	13	10	44	-1	14
Cambodia	4.1	6	5	32	18	23
China (Taiwan)	4.1	4	3	10	3	10
Chile	3.9	2	1	4	12	2
Malawi <sup>f</sup>	3.9	—	—	20	17	—
Philippines	3.6	1	1	—	—	5 <sup>g</sup>
Mauritius	3.5	3	2	10	32	—
Argentina	3.5	—	—	3	2	3
Jordan	3.4	2	—	—	8	—
Zambia <sup>f</sup>	3.2	5	5	27	-7	—
Colombia	3.2	4	4	9	9	9
Uruguay	3.2	1	—	5	5	-1
Iran	3.1	8	8	10	—	8
Algeria	3.0	10 <sup>h</sup>	11	-2	1	3 <sup>i</sup>
Gabon	2.9	8 <sup>h</sup>	8	28	30	5 <sup>j</sup>
India	2.8	5	5	7	5	5
El Salvador	2.7	4	4	7	3	9
Mexico	2.6	4	4	14	4	6
Paraguay	2.4	1	—	15	—	5 <sup>k</sup>
Ecuador	2.3	3	2	6	9	6
Honduras	2.2	6	5	28	—	5
Bolivia	2.1	6	6	10	—	4
Nigeria	2.0	—	—	—	18	20
Republic of Viet-Nam	1.8	12	11	20	15	24
Pakistan	1.8	4	3	4	3	9
Nicaragua	1.8	2	2	11	—	9
Guatemala	1.6	5	5	10	-9	7

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations Educational, Scientific and Cultural Organization, *Statistical Yearbook, 1965* (Paris, 1966).

<sup>a</sup> Arranged in descending order according to percentage of national income spent on education. For exceptions, see foot-note <sup>b</sup>.

<sup>b</sup> 1961 in the case of Algeria, Costa Rica, Iran, Syria, United Arab Republic, Venezuela; gross domestic product in the case of Argentina, Libya, Kenya, Mauritius, Nigeria; gross national product in the case of Ghana, Malawi, Zambia.

<sup>c</sup> Based on the change in the ratio of number of students per 1,000 total population between 1955 and 1963, except in the case of India (1955-1962); Iran, Malawi, Peru, Zambia (1955-1964); Bolivia, Costa Rica, Morocco, Nigeria (1956-1963).

<sup>d</sup> Secondary schools consist of public and private schools of general (academic) educa-

tion and vocational education, including secondary classes attached to institutions at other levels, but excluding evening schools and correspondence courses organized for adults. General secondary excludes vocational secondary. Vocational secondary excludes such schools as: domestic science, music and fine arts, technical, industrial, arts and crafts, trade, commercial agricultural, fishing and forestry.

<sup>e</sup> Third level figures are based on both degree and non-degree-granting institutions of higher education of all types—universities, higher technical schools, teacher-training colleges and theological schools. Figures refer to students who are eligible to sit for examinations and to receive degrees or diplomas.

<sup>f</sup> African education only.

<sup>g</sup> Excluding the University of the Philippines and public chartered colleges.

<sup>h</sup> Excluding third level.

<sup>i</sup> 1955-1960.

<sup>j</sup> 1960-1964.

<sup>k</sup> University of Asunción only.

existing government high school located in the neighbouring town, using the facilities—teachers, site, building and equipment—of the local barrio elementary school. From four such high schools (with an enrolment of 352 students in only one province) in 1964/65—the year of the inception of the programme—the number increased to 415 (with an enrolment of 36,000 in forty-one provinces and five cities) in 1966/67. The main stumbling block appears to have been financial stringency which has often resulted in a lack of textbooks and poor equipment, especially for science and the practical arts courses.

In many developing countries, the main thrust of educational policy is to maximize the effectiveness of public expenditure by means of emphasis on those geographical areas and on those elements of knowledge and skill most closely identified with the needs of economic development. This generally means greater concentration on secondary and technical schools and less on broadening the base of primary education with its relatively high wastage rates

among population groups not yet motivated or not yet involved in the process of economic transformation. As development planning becomes increasingly concerned with manpower needs, current and prospective, so the educational system comes to be regarded more in the light of an instrument through which to seek to meet those needs as efficiently as possible.

#### *Employment policies*

One of the reasons for concern about the educational system in a number of developing countries is the inappropriateness of curricula for the emerging needs of an industrializing society. Graduates who are not readily employable after a lengthy education represent a double waste. Education in such countries makes a much smaller contribution than it should to the problem of absorbing the expanding population of working age in gainful employment.

There are many developing countries in which the expansion in employment in recent years has lagged behind the growth in population (see table 39). For various reasons the absorptive capacity of

Table 39. Developing countries: growth of employment  
(Percentage)

Country <sup>a</sup>	Period	Population	Annual rate of increase in				Ratio, most recent year available, of	
			Employment				Economically active to total population	Industrial employment to economically active population
			Total	Agriculture <sup>b</sup>	Industry <sup>c</sup>	Services <sup>d</sup>		
Costa Rica	1950-1963	40	29	21	41	42	30	19
Venezuela	1950-1961	37	32	09	42	55	32	21
Philippines	1960-1965	32	43	32	84	125	35	15
Guatemala	1950-1964	32	21	17	20	33	31	15
Mauritius	1952-1962	31	13	—03	26	24	28	27
Mexico	1950-1960	31	31	24	42	52	32	19
British Honduras	1946-1960	31	21	18	37	18	30	22
Syria	1960-1965	30	53	90	80	67	27	19
Guyana	1946-1960	30	12	09	21	18	31	27
Panama	1950-1960	30	24	17	48	54	33	13
Honduras	1950-1961	30	—12	—31	18	81	30	10
Nicaragua	1950-1963	29	28	18	33	56	31	16
Trinidad and Tobago	1946-1960	29	18	—04	21	28	34	32
Morocco	1952-1960	28	14	—15	25	30	28	11
Ecuador	1950-1962	28	15	19	—	26	32	19
El Salvador	1950-1961	28	20	15	34	32	32	17
Republic of Korea	1960-1965	28	40	14	109	65	32	12
Chile	1952-1960	27	11	03	08	16	32	28
Paraguay	1950-1962	26	29	26	28	34	34	19
United Arab Republic	1947-1960	24	14	05	11	29	30	12
Peru	1940-1961	23	11	—	11	38	32	19
India	1951-1961	21	63	67	66	39	43	11
Pakistan	1951-1961	20	29	28	57	48	33	10
Jamaica	1953-1960	18	08	—33	48	30	41	22
Argentina	1947-1960	18	13	—08	23	08	38	32
Barbados	1946-1960	13	—01	—12	—10	03	40	25

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Demographic Yearbook and Monthly Bulletin of Statistics*; International Labour Organisation, *Yearbook of Labour Statistics* (Geneva)

<sup>a</sup> Arranged in descending order of rate of increase in population

<sup>b</sup> Agriculture, forestry, hunting and fishing

<sup>c</sup> Mining and quarrying, manufacturing, construction, electricity, gas, water and sanitary services For Morocco, Peru and Trinidad and Tobago, electricity, gas, water and sanitary services are not included in the initial period.

<sup>d</sup> Commerce, transport, storage and communication and services.

agriculture tends to be circumscribed: the pressure of population on the land, unfavourable tenure systems, excessive subdivision, declining or slow-growing overseas demand for the product of the land, technical changes that raise the productivity of cultivators, all have in varying degree helped to reduce the rate of increase in agricultural labour requirements. This, indeed, as indicated in previous chapters, is one of the essential characteristics of the economic development process.

If a growing labour force is to be accommodated, therefore, employment opportunities must open up outside the agricultural sector on an appropriate scale. In many developing countries, the expansion that has taken place has not been vigorous enough to avoid a rapid increase in unemployment. In the 1950's, it is probable that only a fourth of the overall increment in the working-age population went into industrial employment; the bulk of it remained on the land. Thus, although the proportion of the working population engaged in industry rose appreciably—from about 9.5 per cent in 1950 to about 11.3 per cent in 1960 for the developing countries as a whole—the absolute increase was quite inadequate in relation to the growth in population.

In few developing countries are there any precise measurements of employment and unemployment: there is a steady shading from full-time gainful occupation through varying degrees of under-employment to complete idleness. In many cases the townward drift of population has tended to bring into the open under-employment previously hidden away in the agrarian sector. Registration systems, even when only partial, have similarly dramatized the extent of complete joblessness. In India, the number of unemployed rose by 4 million in the course of the second development plan and by a further 4 million in the third plan, thus trebling in the twelve years ending in 1966. A substantially larger number were under-employed in the rural economy.

The need to accommodate a much greater proportion of the increase in the working-age population in industry accentuates the problem of choosing the most appropriate technology (referred to in chapter II). Where capital is scarce and labour abundant, the ratio of labour requirements to capital requirements must clearly be one of the criteria used to determine investment priorities and fiscal treatment of industry. But in many cases the favouring of labour-intensive methods of production in deciding on new industries and making new investments will not be enough. Other approaches will have to be used at the same time, even though, singly, they have not achieved many successes in the past.

One approach is through handicrafts and cottage industries. The importance of these differs considerably from country to country. Where they account for a sizable amount of employment, the

question is usually one of devising ways and means of shielding them against the competition of mechanized factories while simultaneously seeking to improve their performance. Indian experience in this field suggests that the most crucial needs of handicraft industries include the more effective organization of the marketing of their product, the provision of adequate credit to finance inputs (among which mechanical aids may be quite important, especially when electricity supply lines have spread across the district concerned) and the means of teaching and encouraging entrepreneurial and managerial skills and a sense of dynamism even in tradition-ridden activities.<sup>5</sup>

Another approach is through labour-intensive public works. India turned in this direction in the third plan (1960-1965) which included an employment target of 3 million persons (about a billion man-days) in rural public works. In Tunisia, over 70 million man-days of employment were provided in public works programmes in the last two and one-half years of the 1950's. And early in the 1960's, Pakistan launched an experimental programme of rural works in the Eastern Province where unemployment or under-employment was estimated to have affected almost 30 per cent of the labour force. This programme was extended throughout the province in 1962/63. A basic feature was the inauguration of training courses in building, in administration and in agriculture. The Government specified the general nature of the activities that could be undertaken, but the local community determined the details and the priorities.<sup>6</sup> The difficulties appear to have been financial, administrative and technical: occasional lack of funds, materials and skills and occasional delays in the arrival of goods and in land acquisition. But perhaps the most significant lesson was the limitation imposed on the nature of the undertakings by the shortages of qualified engineers and middle-level skills in the technical field.

It is clear that employment problems cannot be tackled on their own, critical as they are in many developing countries. At every turn a factor mix is involved; the scarcest input must be identified at each stage and determined efforts made to overcome

<sup>5</sup> Indian achievements in these fields in the 1950's were not very great, but the Indian problem is unique in its scope. In its textile industry—potentially so important for export purposes—the replacement of handlooms by automatic looms would have displaced 180,000 workers in 1960. According to the Working Group on the Cotton Textile Industry, the cottage sector employed thirty-four times as many workers per dollar of capital as the modern mills.

<sup>6</sup> In 1962/63 and 1963/64 an annual average of 130,000 man-years of employment resulted, and the physical achievements included the construction or repair of 40,000 miles of road, the excavation or clearing of 8,000 miles of irrigation channels, the building of nearly 7,000 culverts and small bridges and the raising or repairing of 1,400 miles of embankments. See *The Third Five-Year Plan (1965-1970)* (Rawalpindi, May 1965), chapter XXIII.

its restrictive effects. And in many cases the bottlenecks have proved to be the lack of particular human skills and capacities.

#### DOMESTIC SAVINGS AND THE MOBILIZATION OF CAPITAL

One of the conclusions of the review of recent development trends in chapter I was that, in most developing countries, the low level of savings remained a major constraint on the pace of economic growth. An increase in the savings ratio was pinpointed as one of the strategic objectives of economic development policies. It was also emphasized that the great bulk of savings came from within the domestic economy and that although the availability of foreign savings had played a significant role in expanding investment in certain countries at certain times, their over-all contribution was relatively small and had declined perceptibly between the mid-1950's and the mid-1960's. It is clear that the process of economic development will continue to depend heavily on the course of domestic saving—on increasing its volume and improving its deployment.

For purposes of analysis and exposition, it is convenient to examine savings according to their principal sources—the public sector and the private sector, and within the latter, private persons and corporate entities. The distinction is by no means watertight—since in most developing countries individual enterprises shade into corporate enterprises, and private enterprises shade into public enterprises—but the instrumentalities for influencing the level of savings and for channelling them into investment do correspond broadly with the threefold breakdown.

In looking at each savings flow separately, however, it is necessary to keep in mind that what is significant, for purposes of promoting economic development, is not the contribution of particular sectors but the savings of the economy as a whole. This is not to say that the transfer of savings from one sector to another has no bearing on the process of economic development—this is an essential function of mobilization machinery linking saving to investment—but merely to stress that an increase in the savings of one sector is not tantamount to an increase in total savings. Nevertheless, policy measures for increasing savings generally do have to be aimed at one or other of the sectors.

#### *The composition of savings*

The total supply of savings in the developing countries in the mid-1960's ranged from less than one-eighth of gross domestic product in Ethiopia,

Morocco, Republic of Viet-Nam, Sierra Leone and United Republic of Tanzania to over one-fourth of gross domestic product in Israel, Trinidad and Tobago and Tunisia (see table 40). One reason for the great differences in the availability of total savings was the great diversity in experience with foreign savings: these ranged from negative amounts (outflows) in the case of some of the mineral and plantation economies (Guyana, Iraq, Kuwait, Malaysia, Mauritius, Southern Rhodesia, United Republic of Tanzania, Venezuela) to very large inflows in the case of such countries as Barbados, Israel, Jordan, Republic of Korea, Republic of Viet-Nam and Tunisia, where the foreign component of savings exceeded the domestic component.

As indicated in chapter I, even domestic savings ratios varied greatly from one country to another. On a gross basis, the ratio was less than 10 per cent of gross domestic product in Barbados, Ethiopia, Guatemala, Jordan, Republic of Korea, Republic of Viet-Nam, Sierra Leone and Togo, and over 20 per cent of gross domestic product in Kuwait, Mauritius, Thailand and Venezuela. And as the range of allowances for depreciation was a fivefold one—from 2 per cent to 10 per cent of gross domestic product—the net domestic savings ratio also differed widely from country to country.

Creating a typical developing country synthetically out of the median values for each of these elements of savings, it would be one in which the total supply of savings amounted to rather more than 16 per cent of gross domestic product—rather less than 14 per cent domestic and rather less than 3 per cent foreign. With just under 5 per cent of gross domestic product being allowed for depreciation, net domestic savings would have amounted to about 8 per cent of gross domestic product and total savings available for new investment to somewhat less than 10 per cent of gross domestic product.<sup>7</sup>

On the basis of the information available—mostly for small countries—the main contribution to net domestic savings comes from the private sector. In relatively few countries—Barbados, Chile, Colombia, Ecuador, Panama, Togo, Venezuela—did net government savings equal or exceed private savings in the mid-1960's (see table 41). In the case of private savings, there was some tendency for households to contribute most among countries with over-average savings ratios and for the corporate sector to contribute most among countries with relatively low savings ratio. For the few countries with data covering the period from the mid-1950's to the

<sup>7</sup> It should be noted that the group of forty-one countries on which these proportions are based is essentially a small-country selection. No suitable data are available for Argentina, Brazil, India, Indonesia, Nigeria and Pakistan—countries in which 60 per cent of the population of the developing world live.

Table 40. Developing countries: levels of foreign and domestic savings,  
average 1963-1965<sup>a</sup>  
(Percentage of gross domestic product)

Country <sup>b</sup>	Total supply of savings <sup>c</sup>	Total net savings <sup>d</sup>	Foreign savings <sup>e</sup>	Total gross domestic savings <sup>f</sup>	Deprecia- tion <sup>g</sup>	Net domestic savings <sup>h</sup>
Israel	29	20	15	14	9	5
Trinidad and Tobago	28	18	9	19	10	9
Tunisia	25	23	14	10	2	8
Thailand	22	16	2	20	6	14
Barbados	21	17	15	6	4	2
Venezuela	20	12	-2	23	9	14
China (Taiwan)	20	14	1	19	6	12
Jamaica	19	12	4	15	7	8
Malaysia	18	14	-1	19	5	14
United Arab Republic	18	16	4 <sup>i</sup>	14	2	12 <sup>j</sup>
Panama	18	10	4	14	8	6
Burma	18	12	-	18	6	12
Colombia	18	9	3 <sup>i</sup>	14	9	6 <sup>j</sup>
Togo	18	10	8	9	7	2
Netherlands Antilles	18	11	4	14	7	6
Ghana	17	..	6	11	..	..
Mauritius	17	..	-6	23	..	..
Jordan	16	16	17	..	..	..
Guyana	16	11	-1	18	5	12
Bolivia	16	11	6	11	5	5
Costa Rica	16	10	5	10	5	5
Mexico	15 <sup>k</sup>	..	2	14	..	..
Iran	15 <sup>k</sup>	10	1	14	5	10
Republic of Korea	15	9	8	6	6	1
Honduras	15	10	..	..	4	..
Philippines	14	9	-1	15	6	9
Sudan	14	..	4	10	..	..
Kuwait	14	10	-19	33	4	29
Ecuador	14	9	3	11	5	6
El Salvador	14 <sup>k</sup>	9	3	10	5	5
Ceylon	14	9	2	12	5	7
Uruguay	13	10	1	13	4	9
Southern Rhodesia	13	13	-3	..	..	16
Chile	13	5	2	11	8	3
Iraq	13	..	-2	15	..	..
Guatemala	13	8	4	9	4	5
Sierra Leone	12 <sup>k</sup>	5	6	6	7	-1
United Republic of Tanzania	12	7	-2	14	5	9
Morocco	11	8	-	12	3	9
Ethiopia	11	..	3	9	..	..
Republic of Viet-Nam	10	5	14	-4	5	-8
Median	16	10	3	14	5	8

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on data from United Nations, *Yearbook of National Accounts Statistics*.

<sup>a</sup> For the following countries the period differs from that stated: United Arab Republic, 1960-1961; Sierra Leone, Togo, 1963-1964; Southern Rhodesia, 1964-1965; Trinidad and Tobago, 1960-1962; Burma, 1960/61-1962/63 (fiscal years ending 30 September); Ethiopia, 1961-1963; Barbados, Costa Rica, Guyana, Iraq, Malaysia, Sudan, 1962/63-1964/65 (fiscal years beginning 1 July); Republic of Viet-Nam, Uruguay, 1962-1964; Iran (fiscal years beginning 21 March), Kuwait (fiscal years beginning 1 April), 1963/64-1965/66.

<sup>b</sup> Countries are arranged in descending order of percentage of total supply of savings to gross domestic product.

<sup>c</sup> Total supply of savings is the sum of depreciation, net domestic savings and foreign savings.

<sup>d</sup> Total net savings equals foreign savings plus net domestic savings.

<sup>e</sup> Foreign savings is equal to payments for imports of goods and services (including factor income paid abroad) minus receipts from exports of goods and services (including factor income received from abroad). A positive foreign savings figure represents an excess of such payments over receipts.

<sup>f</sup> Total gross domestic savings equals net domestic savings plus depreciation (or total supply of savings minus foreign savings).

<sup>g</sup> Depreciation is the provision for the current value of wear and tear, obsolescence and accidental damage to fixed capital.

<sup>h</sup> Net domestic savings is the sum of the surplus of incomings over outgoings in the current accounts of government, enterprises, households and private non-profit institutions. Transfers to and from the rest of the world are excluded from the income and expenditure accounts in estimating the savings of these sectors.

<sup>i</sup> Deficit of the nation on current account.

<sup>j</sup> Including current transfers to and from the rest of the world.

<sup>k</sup> Excluding increase in stocks.

Table 41. Developing countries: level of domestic savings, by sector,  
average 1963-1965<sup>a</sup>

(Percentage of gross domestic product)

Country <sup>b</sup>	Gross domestic savings	Net domestic savings	Net government savings <sup>c</sup>	Private savings		
				Total	Net corporate savings <sup>d</sup>	hold Net household savings <sup>e</sup>
Southern Rhodesia	..	16	3 <sup>f</sup>	15 <sup>f</sup>	11	3 <sup>f</sup>
Venezuela <sup>g</sup>	23	14	8	6	2	4
Mauritius	23	..	3 <sup>f</sup>	20 <sup>f</sup>	11 <sup>f</sup>	9 <sup>f</sup>
Trinidad and Tobago	19	9	3	7	1	6
Peru	19	14	2	12	5	7
Malaysia	19	14	5	9	—	9
China (Taiwan)	19	12	1	12	2	10
Burma	18	12	2	10	1	8
Guyana	18	12	1	11	1	10
Philippines	15	9	2	8	3	5
Jamaica	15	8	1	6	5	1
Colombia <sup>g</sup>	14	6	3	3	3	—
United Arab Republic <sup>g</sup>	14	12	5	7	4	4
Netherlands Antilles	14	6	1	6	—	5
Panama	14	6	3	3	9	6
Uruguay	13	9	—1	10	5	5
Honduras <sup>g</sup>	12	7	—	8	2	5
Ecuador	11	6	5	2	..	..
Chile	11	3	3	—	3	—3
Bolivia	11	5	—1	7	2	4
Costa Rica	10	5	1	4	1	3
Togo	9	2	1	1	3	—2
Guatemala	9	5	1	3	..	..
Republic of Korea	6	1	—	1	2	—2
Barbados	6	2	2	1	4	—4
Jordan	—	—	—8	8	1	7
Republic of Viet-Nam	—4	—8	—8	—	2	—2

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on data from United Nations, *Yearbook of National Accounts Statistics*.

<sup>a</sup> For the following countries, the period differs from that stated: United Arab Republic, 1960-1961; Togo, 1963-1964; Southern Rhodesia, 1964-1965; Trinidad and Tobago, 1960-1962; Burma, 1960/61-1962/63 (fiscal year ending 30 September); Honduras and Peru, 1961-1963; Barbados, Costa Rica, Guyana, Malaysia, Republic of Viet-Nam, Uruguay, 1962-1964.

<sup>b</sup> Countries are arranged in descending order of percentage of gross domestic savings to gross domestic product.

<sup>c</sup> Net government savings include savings of general government and government enter-

prises. However, for Ecuador and the Philippines, government savings also include savings of public corporations. For China (Taiwan) government savings include savings of general government only.

<sup>d</sup> Net corporate savings include savings of public and private corporations, but for Ecuador and the Philippines savings of private corporations only, and for Burma and China (Taiwan), savings of public corporations only.

<sup>e</sup> Net household savings of Burma and China (Taiwan) include savings of private corporations.

<sup>f</sup> Before depreciation.

<sup>g</sup> Including current transfers to and from the rest of the world.

mid-1960's, there was a general tendency for government savings ratios to decline to a greater extent than private savings ratios (see table 42).

The available data are obviously too weak to bear the weight of any firm generalizations except perhaps a negative one: that there is no evidence that one particular source of savings tends to predominate in developing countries. Income levels, corporate structure, the participation of foreign companies, the strength of government and the fiscal system, all play a part in determining the source and magnitude of savings. Hence, if savings ratios are to be raised, no potential source can be overlooked: the effort that is needed must be a broad one.

#### Public savings

The higher the income level in the country and the smoother the functioning of its capital market the less necessary is it for a Government to engage in direct saving efforts. Its concern with savings can be limited to the influence it wishes to bring to bear, through fiscal and monetary policies, on the saving being carried on in the private sector. Its own public sector investments can be financed through normal borrowing on the capital market.

Very few developing countries are in that position. Income levels tend to be too low and the capital market too rudimentary for Governments not to take a more direct part in generating savings. Yet as

Table 42. Selected developing countries: changes in net domestic savings, 1955-1957 to 1963-1965<sup>a</sup>

(Percentage of gross domestic product)

Country <sup>b</sup>	Domestic savings	Government savings	Private savings		
			Total	Corporation (private and public)	Households
Philippines	8	—	7	—	7
China (Taiwan)	8	—1	8	1 <sup>c</sup>	7 <sup>c</sup>
Panama	5	1	4	6	—2
Chile	4	1	3	—1	4
Republic of Korea	3	4	—1	2	—3
Jamaica	1	—1	3	3	—
Trinidad and Tobago	1	—	1	—1	1
Uruguay	1	—4	5	—	—
Guyana	1	—3	3	—1	4
Ecuador	1	—	— <sup>d</sup>	—	—
Peru	—	—	—	1	—1
Honduras	—	—1	1	1	—
Burma	—2	—1	—1	3 <sup>c</sup>	—3 <sup>c</sup>
Guatemala	—3	—3	—	— <sup>e</sup>	—
Costa Rica	—3	—3	—	—	—
Colombia	—5	—1	—4	1	—5
Netherlands Antilles	—9	—2	—7	—	—7
Barbados	—9	—3	—6	—3	—3

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on *Yearbook of National Accounts Statistics, 1966* (United Nations publication, Sales No.: 67.XVII.14).

<sup>a</sup> For the following countries, the period differs from that stated: Burma, 1954/55-1956/57 to 1960/61-1962/63 (fiscal years ending 30 September); Honduras, Peru, 1955-1957 to 1961-1963; Barbados, Costa Rica, Uruguay, 1955-1957 to 1962-1964; Guyana, 1955-1956 to

1963-1964; Trinidad and Tobago, 1955-1957 to 1960-1962; Netherlands Antilles, 1957-1959 to 1963-1965.

<sup>b</sup> Countries are arranged in descending order of change in percentage of gross domestic savings to gross domestic product.

<sup>c</sup> Private corporation savings included in household savings.

<sup>d</sup> Corporations only.

<sup>e</sup> Including household savings.

indicated above, the results of their saving efforts have been rather meagre, giving little assurance that it is in this direction that improvement in developing country savings ratios should be sought.

One clue regarding the reason for this lies in the relative smallness of government resources. In very few countries does the disposable income of government reach a fifth of the gross domestic product (see table 43). Against this, claims for expenditure have tended to rise steadily and rapidly as Governments have extended their sphere of administration and responded to demands for enlarged services in the field of education and health as well as various forms of social welfare.

Thus, between the mid-1950's and the mid-1960's, the current expenditure of government rose more rapidly than total production in almost all developing countries; the exceptions were limited very largely to the high-growth countries such as China (Taiwan), Israel and the Republic of Korea. The income at the disposal of Governments was far less buoyant: in a number of countries, it rose more slowly than total production and in only a few—including, however, India, Nigeria and the Philippines—was its rate of growth significantly above that of the economy as a whole (see table 44).

As a result of these divergent trends, very few developing countries were able to increase their government savings ratios. Of the twenty-five countries for which the relevant data are available over the period, only five registered a gain in the ratio of net government savings to total production (see table 45).

As the proportion of the national income passing through the public sector tends to be much smaller in the developing countries than in the more advanced countries, increases in government savings are more likely to be achieved by expansion in revenue than by reduction in expenditure. This is not to say that government expenditure cannot or should not be trimmed or contained. On the contrary, it is clear that the struggle to improve the efficiency of public administration—that is, to raise the output of essential services per unit of expenditure—is a vital element of the whole economic development effort.

Experience in a number of developing countries—most notably in Chile in recent years—has shown the importance of curbing the growth of employment in public service. Wages and salaries have to be kept in line with trends in the private sector—and this is a matter of over-all economic policy—but

Table 43. Developing countries: government disposable income and its components, average 1963-1965<sup>a</sup>  
(Percentage of gross domestic product)

Country <sup>b</sup>	Government disposable income <sup>c</sup>	Direct taxes			Indirect taxes minus subsidies			Net transfers <sup>d</sup>	Other income <sup>e</sup>
		Total	Household	Corporate	Total	Indirect taxes	Subsidies		
United Arab Republic	33	6	5	1	8	9	1	—	19 <sup>f</sup>
Venezuela	21	9	1	8	7	7	—	-1 <sup>g</sup>	6 <sup>f</sup>
Zambia	21	11	—	—	10	10	—	-1	1
Malaysia	21	6	3	3	13	13	—	—	2
Tunisia	20	8	—	—	13	14	1	-1	—
Israel	18	10	8	2	13	16	2	-4	-1
Ecuador	18	7	4	3	9	9	—	-4	6
China (Taiwan)	18	2	1	1	12	12	—	—	3
Mauritius	16	6	3	3	12	12	—	-3	1 <sup>h</sup>
Burma	15	4	—	—	10	10	—	—	2
Jordan	15	2	—	—	9	9	—	2	2
Netherlands Antilles	15	12	6	5	8	8	—	-4	—
Costa Rica	14	5	3	2	9	10	1	-1	1
Panama	14	6	4	2	7	7	—	-2	2
Guyana	13	7	2	5	9	10	1	-2	-1
Southern Rhodesia	13	7	—	—	7	7	—	-3 <sup>i</sup>	2 <sup>j</sup>
Trinidad and Tobago	13	6	1	5	5	6	1	-1	3 <sup>f</sup>
Chile	13	12	9	3	8	10	2	-7	1
Barbados	13	5	2	3	10	11	—	-2	—
Republic of Viet-Nam	13	1	—	1	12	12	—	—	—
Uruguay	12	16	15	1	8	11	3	-12	—
Jamaica	12	6	3	3	9	10	1	-2	-1 <sup>j</sup>
Philippines	12	4	2	2	8	9	—	-1 <sup>k</sup>	-1
Nigeria	11	2	2	1	8	8	—	-1	1
Sierra Leone	11	5	2	3	7	8	1	-2	1
Republic of Korea	10	3	3	1	6	6	—	—	2
India <sup>m</sup>	10	3	2	1	7	8	1	—	—
Togo	10	2	1	1	9	10	—	—	—
Ghana	9	3	2	2	11	11	—	-4	—
Honduras	9	1	—	1	8	8	1	—	—
Bolivia	9	4	3	1	7	8	2	-3	1
Guatemala	8	2	1	—	7	7	—	-1	—

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Yearbook of National Accounts Statistics*.

<sup>a</sup> For the following countries, the period differs from that stated: Burma, 1960/61-1962/63 (fiscal years ending 30 September); Honduras, 1961-1963; Barbados, Costa Rica, Guyana, Israel, Malaysia, Republic of Viet-Nam, Uruguay, 1962-1964; United Arab Republic, 1960-1961; India, Nigeria, 1960/61-1962/63 (fiscal years beginning 1 April); Trinidad and Tobago, 1960-1962; Sierra Leone, 1962/63-1963/64 (fiscal years ending 31 March); Togo, 1963-1964.

<sup>b</sup> Countries are arranged in descending order of percentage of disposable income to gross domestic product.

<sup>c</sup> Disposable income of Government is the current income available for the purchase of goods and services. It is defined as the sum of direct and indirect taxes and other incomes, minus subsidies and net transfers to households

and private non-profit institutions. Disposable income excludes transfers to and from abroad.

<sup>d</sup> Net transfers are shown with a reversal of sign as a deduction from government income.

<sup>e</sup> Other income is defined as the income from property and entrepreneurship minus interest on the public debt.

<sup>f</sup> Income from property and entrepreneurship only.

<sup>g</sup> Current transfers to households and non-profit institutions only.

<sup>h</sup> Including depreciation.

<sup>i</sup> Including current transfers to and from the rest of the world.

<sup>j</sup> No imputation is made for the rental value of government buildings.

<sup>k</sup> Current transfers from household sector included in direct taxes.

<sup>l</sup> Income from property and entrepreneurship only, which includes savings of public corporations.

<sup>m</sup> Data based on net domestic product at factor cost.

the numbers taken on to the government payroll are capable of specific and strict control. This is particularly important in the many cases in which the Government is called upon to provide some new service: efficiency demands careful co-ordination of capital outlays, current expenditures and manpower requirements—all budgeted ahead in the framework of the development plan.

Similar considerations apply to those parts of the public sector that are revenue-earning. The need in

the first instance is for efficient management—the provision of the service in question at the lowest possible cost—and experience has shown that the temptation to take on more than the necessary staff tends to be even more acute in such public enterprises than in the civil service proper. From the point of view of government expenditure, however, comparable importance attaches to pricing policy. In normal circumstances, there is every reason for requiring public entities to pay their way: if strenu-

Table 44. Developing countries: elasticities of general government current revenue and expenditure, 1955-1965<sup>a</sup>

(Ratio, percentage change in item to change in gross domestic product)

Country <sup>b</sup>	Government disposable income	Taxes			Current expenditure
		Total	Direct	Indirect	
Netherlands Antilles	4.7	9.6	11.5	7.2	12.9
Nigeria <sup>c</sup>	3.9	2.3	-1.5	5.2	4.1
Republic of Korea	1.8	1.3	1.6	1.2	1.0
India <sup>d</sup>	1.6	1.9	1.4	2.1	1.8
Mauritius	1.4	1.8	0.7	2.6	2.0
Southern Rhodesia	1.4	1.1	1.0	1.3	1.7
Philippines	1.4	1.5	1.9 <sup>e</sup>	1.4 <sup>f</sup>	1.4
Ecuador	1.2	1.3	2.8	0.8	1.2
Panama	1.1	1.4	2.1	1.0	1.0
Chile	1.1	1.3	1.2	1.3	1.0
Israel	1.1	1.2	1.2	1.2	0.9
Peru	1.1	1.4	1.2	1.5	1.3
Burma	1.1	0.7	0.9	0.6 <sup>g</sup>	1.6
Jamaica	1.0	1.7	1.8 <sup>h</sup>	1.7 <sup>i</sup>	1.4
Costa Rica	1.0	1.1	1.7	0.9	1.8
Uruguay	1.0	1.1	1.4	0.8	1.5
Trinidad and Tobago	1.0	0.9	1.0	0.9	1.0
Colombia	0.9	1.0	1.1	0.9	1.1
Zambia	0.9	1.3	0.1	8.1	2.7
China (Taiwan)	0.9	0.7	0.5	0.8	0.9
Barbados	0.7	0.7	0.5	0.8	1.3
Ghana <sup>j</sup>	0.7	1.4	2.6	1.1	1.4
Guyana	0.6	0.8	0.9	0.7	1.2
Honduras	0.5	0.7	0.5	0.8 <sup>k</sup>	1.2
Guatemala	0.4	0.7	0.2	0.9	1.3

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on *Yearbook of National Accounts Statistics, 1966* (United Nations publication, Sales No.: 67.XVII.14).

<sup>a</sup> For the following countries, the period differs from that stated: Barbados, Costa Rica, Guyana, Israel, Uruguay, 1955-1964; Honduras, 1955-1963; Burma 1954/55-1962/63 (fiscal years ending 30 September); India, Nigeria, 1955/56-1962/63 (fiscal years beginning 1 April); Trinidad and Tobago, 1955-1962; Netherlands Antilles, 1957-1965.

<sup>b</sup> Countries are arranged in descending order according to elasticities of government disposable income.

<sup>c</sup> Gross domestic product at factor cost.

<sup>d</sup> Net domestic product at factor cost.

<sup>e</sup> Including current transfers from households and private non-profit institutions.

<sup>f</sup> Including surpluses of the Bureau of Posts and Telecommunications.

<sup>g</sup> Including current transfers from public corporations.

<sup>h</sup> Including taxes on land.

<sup>i</sup> Excluding taxes on land.

<sup>j</sup> Central government (including social security funds).

<sup>k</sup> Including profits of government enterprises.

ous efforts are made to hold down costs, prices can well be set at least to cover them, including appropriate allowances for depreciation. In many developing countries, power and water enterprises and even transport services earn significant profits to pass on to government revenue. Where, for social reasons or as part of development tactics, such services are provided at less than cost, the nature and size of the subsidy paid to them from the budget need to be given due scrutiny and publicity.

Even with the most stringent control on expenditures, government savings are unlikely to expand unless appropriate action is taken on the revenue side. Though over-all tax yields are generally much lower in developing countries than in more advanced countries, the problem of increasing them is by no means simple. The tax base is often rather narrow and there are great administrative difficulties in

broadening it. In many cases it continues to be convenient to derive a high proportion of revenue from the foreign trade sector, either through import or export duties on commodities moving in or out, or through direct taxes on the income of the individuals or corporations producing or trading in those commodities. Against the convenience and efficiency of such taxes is their general unresponsiveness to the course of development. The process of import substitution tends to undermine the basis of customs revenue, beginning very often with the consumer goods which once yielded the bulk of the duty collected. A decline in the world price of major export commodities can similarly reduce the yield of taxes on the export sector.

While there has been some tendency for the relative contribution of direct taxes to increase in developing countries in recent years, indirect taxes

Table 45. Developing countries: changes in levels of general government savings, consumption and disposable income, 1955-1957 to 1963-1965<sup>a</sup>

(Percentage of gross domestic product)

Country <sup>b</sup>	Net savings	Consumption	Disposable income	Total tax receipts	Direct taxes			Indirect taxes		
					Total	Household	Corporate	Totale	Taxes	Subsidies
Republic of Korea	4	—	4	2	1	—	—	1	1	—1
Israel	3	—2	1	3	1	1	—	3	2	—
Chile	1	—	1	4	2	2 <sup>d</sup>	— <sup>d</sup>	1	2	1
Panama	1	—	1	2	2	2	1	—	—	—
Nigeria <sup>e</sup>	1	3	4	2	—2	—	—	4	3	—
Ecuador	—	1	2	2	3	1	2	—1	—1	—
Philippines	—	2	2	2	1	1 <sup>f</sup>	1	1	1 <sup>g</sup>	— <sup>h</sup>
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—
India <sup>i</sup>	—	2	1	2	—	—	1	2	2	—
China (Taiwan)	—1	—1	—2	—3	—1	—	—1	—2	—2	—
Southern Rhodesia	—1	2	2	1	—	—	—	2	1	—1
Peru	—1	2	1	3	1	1	—	2	3	—
Colombia	—1	1	—1	—	—	—	1	—1	—1	—
Mauritius	—1	3	2	3	—1	—	—1	4	4	—
Burma	—1	2	—	—1	—	—	—	—1	—1 <sup>j</sup>	—
Jamaica	—1	2	—	4	1	1	— <sup>k</sup>	2	2 <sup>l</sup>	—
Honduras	—1	—	—1	—1	—	—	—	—1	— <sup>m</sup>	— <sup>n</sup>
Netherlands Antilles	—2	4	2	4	3	3	—	1	1	—
Guyana	—3	1	—2	—1	—	—	—1	—1	—1	—
Costa Rica	—3	3	—	1	1	1	—	—	—	—
Guatemala	—3	1	—2	—1	—1	—	—	—	—	—
Ghana <sup>o</sup>	—3	1	—2	2	1	2	—	1	1	—
Barbados	—3	1	—2	—2	—1	—1	—	—	—1	—1
Uruguay	—4	4	—	2	4	4	—	—1	—2	—
Zambia	—6	5	—1	2	—5	—	—	7	7	—

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on *National Accounts Statistics, 1966* (United Nations publication, Sales No.: 67.XVI.14).

<sup>a</sup> For the following countries, the period differs from that stated: Barbados, Costa Rica, Israel, Uruguay, 1955-1957 to 1962-1964; Guyana, 1955-1956 to 1963-1964; Honduras, 1955-1957 to 1961-1963; Burma, 1954/55-1956/57 to 1960/61-1962/63 (fiscal years ending 30 September); India, Nigeria, 1955/56-1957/58 to 1960/61-1962/63 (fiscal years beginning 1 April); Trinidad and Tobago, 1955-1957 to 1960-1962; Netherlands Antilles, 1957-1959 to 1963-1965.

<sup>b</sup> Countries are arranged in descending order of change in percentage of net savings to gross domestic product.

<sup>c</sup> Indirect taxes minus subsidies.

<sup>d</sup> Direct taxes on unincorporated enterprises included in direct taxes on corporations.

<sup>e</sup> Gross domestic product at factor cost.

<sup>f</sup> Including current transfers from households and private non-profit institutions.

<sup>g</sup> Including surpluses of the Bureau of Posts and Telecommunications.

<sup>h</sup> Including losses of the Bureau of Posts and Telecommunications.

<sup>i</sup> Percentage of net domestic product at factor cost.

<sup>j</sup> Including current transfers from public corporations.

<sup>k</sup> Including taxes on land.

<sup>l</sup> Excluding taxes on land.

<sup>m</sup> Including profits of government enterprises.

<sup>n</sup> Including losses of government enterprises.

<sup>o</sup> Central government (including social security funds).

still account for the bulk of total collections in most cases (see table 46). And even where direct taxes provide more than half, they are often derived from export industries—as in the case of Chile, Netherlands Antilles, Trinidad and Tobago, Venezuela and Zambia, for example—so that many of their essential features are the same as those of the indirect taxes levied on the commodities concerned. The expansion of such tax revenue is linked more closely to the evolution of world markets than to the domestic growth of the economy in question.

There is an urgent need in many developing countries to find new tax sources, particularly sources that have a high growth potential, and hence assure the public sector of its share of total output. Whether this means new direct taxes on incomes or new indirect taxes on domestic sales or purchases, it is

likely to involve a reorganization of the system of tax administration. In many countries, improvements in fiscal administration are needed irrespective of changes that may be made in the tax base. Defective legislation and poor collection procedures often reduce tax revenue well below the amounts actually due. Exemption levels are sometimes rather high, important sources of income go untaxed, and evasion is difficult to prevent. In these circumstances, simplification of both laws and procedures would help to improve performance. Taxpayers need to know and understand their obligations and to be put into a position of being able to fulfil them with the minimum of administrative difficulty.

How far the tax system should go in putting resources into government hands is a question for each country to decide. In the least developed coun-

Table 46. Developing countries: level of government total tax receipts and components, average 1955-1957 and 1963-1965

Country <sup>a</sup>	Period	Total tax receipts (percentage of GDP)	Indirect taxes	Direct taxes		
				Total (Percentage of total tax receipts)	Corporate	Household
Uruguay	1955-1957	25	52	48	3	46
	1962-1964	28	42	58	2	56
Israel	1955-1957	22	61	39	7	33
	1962-1964	26	61	39	7	32
Tunisia	1960-1962	22	66	34		34
	1963-1965	22	65	35		35
Chile	1955-1957	18	44	56	19 <sup>b</sup>	37 <sup>b</sup>
	1963-1965	22	45	55	15 <sup>b</sup>	40 <sup>b</sup>
Zambia	1955-1957	20	15	85		
	1963-1965	21	47	53		
Netherlands Antilles	1957-1959	16	44	56	33	24
	1963-1965	20	41	59	27	32
Mauritius	1955-1957	15	57	43	25	19
	1963-1965	18	68	32	17	15
Guyana	1955-1956	18	65	35	28	7
	1963-1964	17	63	37	27	10
Peru	1955-1957	13	63	37	27	10
	1963-1965	16	66	34	20	14
Ecuador	1955-1957	14	72	28	10	18
	1963-1965	16	57	43	20	23
Venezuela	1960-1962	17	54	46	41	5
	1963-1965	16	46	55	49	6
Barbados	1955-1957	18	63	37	20	16
	1962-1964	16	66	34	20	14
Jamaica	1955-1957	12	63 <sup>c</sup>	37	27 <sup>d</sup>	10
	1963-1965	16	62 <sup>c</sup>	38	21 <sup>d</sup>	17
Southern Rhodesia	1955-1957	14	46	54		
	1963-1965	15	49	51		
Costa Rica	1955-1957	14	73	27	13	14
	1962-1964	15	68	32	12	20
Burma <sup>e</sup>	1955-1957	15	71 <sup>f</sup>	29		
	1961-1963	14	69 <sup>f</sup>	31		
China (Taiwan)	1955-1957	17	84	16	9	7
	1963-1965	14	87	13	6	7
Ghana <sup>g</sup>	1955-1957	12	84	16	14	1
	1963-1965	14	77	23	11	12
Panama	1955-1957	12	63	37	14	23
	1963-1965	14	54	46	16	30
Philippines	1955-1957	10	74 <sup>h</sup>	26	9	16 <sup>i</sup>
	1963-1965	12	71 <sup>h</sup>	29	12	17 <sup>i</sup>
Bolivia	1958-1960	12	61	39	6	33
	1963-1965	12	66	34	8	26
Trinidad and Tobago	1955-1957	13	51	49	41	8
	1960-1962	12	50	50	38	12
Colombia	1955-1957	11	61	39	14	24
	1963-1965	11	57	43	19	23
India <sup>j</sup>	1955-1957	9	69	31	5	25
	1960-1962	11	73	27	9	18
Nigeria <sup>k</sup>	1955-1957	9	57	43		
	1960-1962	11	79	21	5	17
Jordan	1959-1961	10	84	16		
	1962-1964	11	84	16		
Honduras	1955-1957	10	85 <sup>l</sup>	15	8	7
	1961-1963	10	86 <sup>l</sup>	14	10	5

Table 46. Developing countries: level of government total tax receipts and components, average 1955-1957 and 1963-1965 (*continued*)

Country <sup>a</sup>	Period	Total tax receipts (percentage of GDP)	Indirect taxes	Direct taxes		
				Total (Percentage of total tax receipts)	Corporate	Household
Guatemala	1955-1957	10	75	25	8	17
	1963-1965	9	80	20	4	16
Republic of Korea	1955-1957	7	70	30	4	26
	1963-1965	9	65	35	9	26

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on *Yearbook of National Accounts Statistics, 1966* (United Nations publications, Sales No.: 67.XVII.14).

<sup>a</sup> Countries are arranged in descending order of percentage of total tax receipts to gross domestic product for 1963-1965.

<sup>b</sup> Direct taxes on unincorporated enterprises included in direct taxes on corporations.

<sup>c</sup> Excluding taxes on land.

<sup>d</sup> Including taxes on land.

<sup>e</sup> Fiscal years ending 30 September.

<sup>f</sup> Including current transfers from public corporations.

<sup>g</sup> Central government (including social security funds).

<sup>h</sup> Including surpluses of the Bureau of Posts and Telecommunications.

<sup>i</sup> Including current transfers from households and private non-profit institutions.

<sup>j</sup> Fiscal years beginning 1 April. Percentage of net domestic product at factor cost.

<sup>k</sup> Fiscal years beginning 1 April. Percentage of gross domestic product at factor cost.

<sup>l</sup> Including profits of government enterprises.

tries there is little in the way of a capital market, and where the government has special responsibilities for investment for economic growth there is need for a much greater saving effort in the public sector than in the case of more industrialized countries. Even in low-income countries, however, the tax system needs to be designed as far as possible to tap funds that would otherwise be used for consumption; transferring savings from the private to the public sector is better accomplished by borrowing. The Government's role in these circumstances is to augment national savings, not merely arrange for their transfer.

#### *Private savings*

As indicated above, the private sector has provided most of the savings of the developing countries in recent years. It is probable—though this cannot be documented—that in most developing countries the bulk of the private saving is generated in the business sector. The growth of private saving is closely related to the growth in total income. The challenge of economic development is in part to reverse this link: if saving rates can be raised, the rise in income will follow, making the next round in the growth of savings that much easier.

To raise private savings ratios is a complex task involving simultaneous action on a number of fronts, including the general economic environment, fiscal and monetary policy, and the creation or stimulation of various mechanisms to tap the income structure at the strategic points where savings might emerge. The combination of instruments likely to be most effective will differ from case to case, depending not only on the size of incomes and the way they accrue but also on personal attitudes regarding the future in general and the function and form of savings in particular, as well as on the existing institutional arrangements for facilitating gainful investment-

directed saving. In the present context, no attempt can be made to provide a systematic review of this complex of problems; all that is possible is to point out a few of the events and experiences of recent years that seem to throw light on priorities or solutions.

One feature that stands out in a number of developing countries is the strength of old customs and attitudes. The preference for holding assets in some physical form—land in some countries, cattle in others, gold or other precious metal in yet others—has proved quite intractable and would seem to point to two conclusions. The first relates to the importance of confidence and stability: the more doubt there is about these in the minds of individuals, the less willing are they likely to be to see their savings mobilized in an investible form. The second relates to the continuing need both for education and for the spread of easy and accessible savings mechanisms; the latter often seem to be the best means of providing the former.

When the reluctance is not too deep-seated and the doubts are only marginal, saving can be stimulated by economic incentives. In a number of countries—including Mexico, Peru, Philippines, Thailand—the evidence suggests that personal saving tends to respond to an increase in interest rates. India has attracted small savings into low-denomination bonds with the offer of an interest rate that rises with the length of the loan. A lottery component has successfully been built into savings plans and sales of government bonds in Pakistan and in several Latin American countries. The setting up of a Deposit Insurance Corporation in India in 1962 resulted in a sharp increase in the number of savings accounts in insured banks. Bonds with a gold clause or a cost-of-living-index link have been successful in increasing personal lending to the Government

in Israel and elsewhere. India and a number of other countries exempt the interest earned on small savings from income-tax.

One of the most tested means of providing a trusted and accessible outlet for personal savings has been the system of post office savings banks. Still expanding in a number of countries—including India, Sudan and United Arab Republic—post office savings have been losing ground to more dynamic institutions elsewhere, especially the commercial banks which in some countries have spread much further into the rural areas in recent years. Partly as a result of more intense advertising and the offer of higher interest rates, savings and time deposits in such institutions have risen very vigorously in recent years in quite a number of developing countries (see table 47).

**Table 47. Developing countries: time and savings deposits, 1955-1965**

Country	1955 (Percentage of gross domestic product)	1965	Growth in real value, 1955-1965 (average annual growth rate, percentage) <sup>a</sup>	Cost of living index, 1965 (1955 = 100)
Ceylon	7	7	13	113
Chile	2	3	12	1,280
Colombia	3	3	3	280
Ecuador	2	3	8	119
Ghana	1	4	12	183
Guatemala <sup>b</sup>	1	5	25	100
India <sup>b</sup>	5	8	7	174
Iraq	3	5	13	114
Jamaica	9	16	12	134
Mexico <sup>b</sup>	2	3	12	149
Morocco <sup>c</sup>	2	2	1	129
Pakistan <sup>b</sup>	2	6	16	129
Panama	2	6	18	104
Peru	7	9	8	233
Philippines	6	12	12	140
Republic of Korea	1	5	32	356
Thailand	2	10	25	121
United Arab Republic	5	10	14	126
Venezuela <sup>d</sup>	4	7	14	111

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on International Monetary Fund, *International Financial Statistics* (Washington, D.C.).

<sup>a</sup> Deflated by cost of living index.

<sup>b</sup> Time deposits only; for India, national income, instead of gross domestic product.

<sup>c</sup> 1958 instead of 1955.

<sup>d</sup> Time and foreign currency deposits.

Savings banks as such have not made much headway in the developing countries. Recently, however, a special effort was launched with Alliance for Progress support in a number of Latin American countries to organize building societies or savings and loan associations with a view to financing residential housing.

Life insurance has also undergone a recent upsurge (see table 48). In some countries, this reflects the expansion of middle-income urban population groups.

**Table 48. Developing countries: life insurance in force, 1955-1966**

(Percentage of gross domestic product)

Country	1955	1960	1966 <sup>a</sup>
Argentina	4	3	6
Chile	1	1	2
China (Taiwan)	3	2	4
Colombia	10	11	14
Costa Rica	12	18	21
Ecuador	3	3	3
Guatemala	8	9	6
India	11	15	17
Israel	5	7	21
Mexico	7	9	18
Pakistan		3	6
Peru	6	6	5
Philippines	11	17	21
Republic of Korea		4	12
Thailand	6	4	8
Uruguay	3	2	
Venezuela	7	9	

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on International Monetary Fund, *International Financial Statistics*; *Life Insurance Fact Book, 1967* (New York).

<sup>a</sup> 1965 in some cases.

In several Latin American countries—including Colombia, Mexico and Venezuela—it reflects revision of insurance legislation and reorganization of the companies: based on new mortality tables and a more favourable premium structure, insurance has been made more attractive, even in an inflationary environment.

The spread of social security programmes and provident funds has also tapped the savings of large numbers of families. They have added to the savings of the economy during the building-up and during subsequent expansion. Their contribution has been greatest in some of the Asian countries, including Ceylon, India, Malaysia and the Philippines.

More directly linked to industrial investment have been the *financieras* pioneered in Mexico in the 1930's. Originally attracting short-term lending by offering relatively high interest rates, these institutions have spread to many Latin American countries. In Mexico they have lost their preferential status and are now subject to the same reserve requirements as other lending institutions. Selling more of their own bonds as a result, they still have considerable appeal to middle-income and upper-income groups.

These groups have also been encouraged to save more by the attraction of mutual funds, allowing for a wider spread of risks among different investments that would otherwise be beyond the range of most individuals. Such funds have begun tapping personal savings in a number of countries, including Chile, India, Mexico and Pakistan. In Colombia, mutual funds seem to have served a useful purpose in recent years in educating the public both as to investment techniques and as to information in the

field of corporate finance. In India and Pakistan, the Government has played a part in the movement by setting up low-denomination unit trusts based on corporate shares.

Innovations in the means of stimulating corporate savings have been fewer. Perhaps the most important is a tendency for Governments to allow a more rapid writing-off of capital expenditure. This has helped to meet the problems posed by the speeding up of technological change. It has also helped to meet the particular problems encountered by firms operating in an inflationary economy where historical cost has little relevance to replacement cost at the end of even a short-lived capital asset. Depreciation periods of less than five years for plant and equipment are not uncommon.

In this area, Governments still face a number of dilemmas. Higher taxes on business incomes may merely transfer savings to the public sector rather than increase the total volume of savings. Higher taxes on distributed earnings than on retained earnings may encourage re-investment, but use of the funds by shareholders might have resulted in an investment pattern more productive from the point of view of the economy as a whole. In a developing country, indeed, some additional movement of capital may often be desirable, helping to create a more effective capital market and thus improve the efficiency of resource allocation.

#### *The channelling of savings into productive investment*

Many of the institutional innovations mentioned in the previous sections serve not only to facilitate the saving process but also to channel the resulting funds into the economy. In their efforts to promote growth, diversification or other social or economic objectives, however, Governments in the developing countries have also sought by various means to influence the direction in which the savings flow. In most cases, this has meant efforts to stimulate the flow as such (that is, to prevent it from stagnating in relatively unproductive pools), the provision of special incentives to direct the flow in particularly desired uses and the creation of institutions to carry out or support particular types of investment.

The more general efforts to increase mobility have been aimed at improving the market for capital which in many developing countries is still a very ineffectual mechanism, reflecting not only the smallness of *per capita* incomes and the skewness of their distribution but also the prevalence of family concerns, the narrowness of the corporate base<sup>8</sup> and unfamiliarity with various techniques for pooling resources

for the purpose of creating viable enterprises. The building up of confidence in the institutions constituting a securities market has proved to be a slow process, especially in countries with a long experience of economic instability. Part of the process lies in the improvement of the legal foundations of corporate activity—especially in respect of the issuing of new securities and transactions in issued stock—both in the company law itself and in government supervision and court procedures and practices. Models and formulae are rarely transferable from one country to another without careful adaptation to the local institutional framework and customs. Such adaptation has been continuing in recent years, but there is no quick solution.

Governments in some developing countries have sought to spread the practice of security holding by issuing their own bonds in forms designed to be attractive—low denominations, favourable interest rates, lottery prize incentives, guarantees of purchasing power, tax exemptions. Encouragement has also been given—in Mexico and elsewhere—to the public issue of shares by concerns enjoying government financial support. Efforts have also been made to strengthen the capital market by the filling of institutional gaps. Among the facilities found most useful for mobilizing capital have been the arrangements made for underwriting new issues. Some Governments have also taken steps to create a local money market, facilitating transactions in short-term obligations and thus putting to use funds that would otherwise be idle.

One of the most widespread of these new institutions has been the development corporation. In many countries, such entities have been established to provide the longer-term finance not available from the commercial banks. In some cases, they have been designed as general multipurpose financing organisms, in other cases they have been more specialized—charged with the provision of resources for specific sectors, particularly industry. Specialization has led in some cases to the acquisition of expertise in technical fields which could also be put at the disposal of the economy through consultation services. In other cases, the specialization has been of a regional nature—as in the case of the Guyana Development Corporation in Venezuela and the Banco del Norte in Brazil.

The most important contribution of these bodies has usually been in connexion with new enterprises which, because of the inadequacies of the local capital market, tend to experience great difficulty in obtaining finance. The development corporations themselves have often faced a financial problem: they have been more active in lending than in seeking to tap private savings and, by lending for long-term investment, they have proved very slow in becoming revolving funds. In the face of low earnings and difficulties in

<sup>8</sup> It has been estimated that 70 per cent of all locally issued securities are held by 1 per cent of all shareholders in the case of Colombia, and by about 5 per cent in the case of Chile.

selling participations, they have often remained dependent on continuing inflow of public funds. In some cases, however, efforts have been made to induce other institutions, such as commercial banks, to acquire corporation securities. Some of these corporations, moreover, have been the vehicle through which external funds have been channelled into industry either directly or indirectly, through their encouragement of foreign entrepreneurs to invest in local firms. Development corporations, such as CORFO in Chile, the Industrial Development Bank in India, the National Financiera in Mexico and the Industrial Development Bank in Pakistan among others, provide guarantees for foreign suppliers and investors.

In recent years, more of these corporations have been formed in the private sector, though not necessarily without public support, sometimes both from the national Government and from international lending institutions. Even more than some of the public bodies, these private development corporations have tended to provide not only medium-term and long-term capital but also managerial and technical guidance both in identifying investment opportunities and in setting up enterprises to exploit them. Their contribution in these fields is difficult to measure, but some idea of its potential importance may be inferred from the fact that in the first seven years of its existence, the Pakistan Industrial Credit and Investment Corporation was responsible for about half of that country's total private investment in industry.

#### EXPORT EARNINGS

As indicated in chapter I, one of the main factors inhibiting the growth of income in many developing countries has been an inability to expand exports at a sufficiently rapid pace. Although most countries have succeeded in recent years in broadening their domestic economic base, thereby lessening their extreme dependence on foreign trade, exports generally constituted a higher proportion of gross product in the mid-1960's than in the mid-1950's. Thus, for most developing countries, foreign trade remains a key variable in the development equation. In particular, it is the means for obtaining the plant and equipment required for achieving increased rates of capital formation. Beyond providing the essential import component of investment, export earnings are also a major determinant of incomes and of the domestic savings which finance the bulk of capital formation.

The range of export performance among the developing countries in recent years has been an extremely wide one and the reasons for these differences in results have been equally diverse. The initial size of the export sector—and such associated factors as commercial know-how and experience, port facilities and the existence of substantial traditional

markets—has not had a decisive bearing on the ability of countries to increase exports. Indeed, as may be seen from table 49, a number of the countries whose exports grew comparatively rapidly between 1955 and 1965 had relatively small export sectors at the beginning of the period. Exports in a number of the largest exporting nations, such as Argentina, Brazil, India and Venezuela, have in fact grown quite slowly. Moreover, the degree of success in diversifying markets does not seem to have been a decisive factor in contributing to export success or failure. With the loosening of traditional trade ties, many developing countries have broadened their export markets geographically though not always with discernible effects on the rate of growth in trade. Where a country's main traditional market is enjoying vigorous growth, the need for diversification—whatever may be its long-range merits in other respects, such as promoting stability of earnings—is obviously less acute than when a major market is languishing.

#### *Problems of commodity composition*

Among the many factors that have contributed to the wide range of developing-country export experience, one of the more important has been commodity composition. Because of the predominance of primary products in exports, earnings depend greatly on the growth in world demand for the commodities in question. As indicated in chapter V, this has differed markedly from one item to another, mineral products generally having fared better than agricultural.

Though the market for many of the items exported by developing countries has often to be accepted as given, the exporting country is not wholly without the means of improving its position. If the country's contribution to world supply is small, it can increase the volume of its exports without fear of unduly (and adversely) affecting price. The quality of the export has also been shown to be a significant determinant of salability and unit value. Thus, an important element in performance has been the orientation, thrust and vigour of the country's development efforts and, in particular, the emphasis placed by both private and public sectors on the promotion of production for export). One aspect of this has been the emphasis placed on the development of manufacturing industries and success in developing manufactured products for export markets.

Where a country has placed reliance in the main on traditional primary products, a major determinant of its export success has been the growth in external demand for the product in question. The relatively slow growth in exports of a number of countries may be explained in part by their heavy dependence on products for which the growth in world demand was sluggish, as in the case of Argentina (wheat), Brazil (coffee), India (jute and tea), Mexico

Table 49. Growth in exports of developing countries, 1955-1965

Country <sup>a</sup>	Total exports <sup>b</sup>				Proportion of total exports accounted for by 3 main national markets	
	1955-1956 (millions of dollars)	1964-1965	Growth, 1955-1965		1955-1956 (Percentage)	1964-1965 (Percentage)
			Value <sup>c</sup> (Annual percentage rate)	Quantum <sup>e</sup> (rate)		
Libya	13	708	57	40	72	69
Republic of Korea	22	147	24	20	88	69
Israel	99	401	17	17	48	36
China (Taiwan)	121	442	16	11	60	60
Iran	440	1,279	13	13	28	35
Sierra Leone	33	92	13	9	83	94
Liberia	51	131	11	15	92	75
Cambodia	40	97	10	..	73	45
Jordan	11	26	10	13	75	48
Peru	288	666	10	9	58	54
Trinidad and Tobago	180	404	9	11	48	56
Panama	34	75	9	11	96 <sup>d</sup>	82 <sup>d</sup>
Hong Kong	503	1,078	9	..	35	46
Jamaica	102	215	9	7	90	84
Lebanon	37	77	9	13	29	39
Surinam	29	54	7	..	89	89 <sup>e</sup>
Nigeria	374	676	7	6	86	62
Honduras	62	111	7	10	82	79
Philippines	427	755	7	5	81	84
Thailand	348	608	6	7	68	43 <sup>e</sup>
Argentina	937	1,452	5	6	45	38
United Arab Republic	414	572	4	2 <sup>f</sup>	30	35
Pakistan	371	511	4	-2 <sup>f</sup>	40	30
Mexico	810	1,100	4	..	85	67
Venezuela	1,995	2,724	4	4 <sup>f</sup>	78	68
India	1,288	1,718	3	3	48	40
Bolivia	79	102	3	-2	90	86
Chile	507	655	3	4	71	57
Brazil	1,453	1,513	1	1	59	50
Burma	239	232	—	-3 <sup>f</sup>	42	34

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Yearbook of International Trade Statistics*; International Monetary Fund, *International Financial Statistics*.

<sup>a</sup> Countries are ranked in descending order of increase in total export value.

<sup>b</sup> Values based on data in current dollars. Growth rates calculated as compound rates of change between first two years and last two years of period.

<sup>c</sup> Based on either *International Financial Statistics* quantum index, 1958 = 100, or *Yearbook of International Trade Statistics* data converted to 1960 prices.

<sup>d</sup> Not including undervaluation adjustment for bananas, but including exports of petroleum products to the Canal Zone.

<sup>e</sup> 1963-1964.

<sup>f</sup> Based on volume of: rice for Burma; jute for Pakistan; cotton for United Arab Republic; petroleum for Venezuela.

(coffee, cotton), Pakistan (cotton and jute). In a number of instances, the country's exports were adversely affected by the failure to expand supply more vigorously, as in the case of Argentina (meat), Bolivia (tin), Burma (rice) and Chile (copper) (see table 50).

A number of countries achieved high rates of exports growth by entering a large or rapidly growing market for a primary or semi-manufactured product or by expanding their previous participation in a large or dynamic market. The former situation is exemplified by Panama (petroleum) and Peru (fish meal); there are many examples of the latter, including Cambodia (rice); Iran (petroleum products); Israel (citrus fruits); Jamaica (alumina);

Jordan (phosphates); Liberia (iron ore); Trinidad and Tobago (petroleum).

While a majority of the countries with high rates of growth of exports depended principally on one or more primary products to achieve rapid growth in export earnings, in a number of instances a large part of the increase was due to the development or expansion of a market for manufactured products. Manufactures exports have tended to grow more rapidly than the traditional exports of many countries and, consequently, have generally come to account for an increasing share of total exports (see table 51). In several countries the growth was mainly concentrated in a single item, as in the case of Israel (diamonds). In other instances the ex-

Table 50. Developing countries: growth in exports, total and main commodities, 1955-1965

Country <sup>a</sup>	Growth in value of total exports, 1955-1965 <sup>b</sup> (annual percentage rate)	Principal export commodities <sup>b</sup>	Growth, 1955-1965			
			Main items, 1964-1965		Proportion of total exports	
			Value (Annual percentage rate)	Quantum (Annual percentage rate)	1955-1956 (Percentage)	1964-1965 (Percentage)
Libya	57	Petroleum	c	c	—	98
Republic of Korea	24	Textiles and clothing	d	d		25
		Plywood	d	d		10
Israel	17	Diamonds	30	12	23	36
		Citrus fruits	15	7	38	20
China (Taiwan)	16	Sugar	5	2	52	21
		Fruits and vegetables				21
		Textile yarn, fabrics				10
Iran	13	Petroleum	15	21 <sup>e</sup>	75	88
Sierra Leone	13	Diamonds	36	13	22	59
		Iron ore and concentrates	12	5	35	16
Liberia	11	Iron ore and concentrates	32	24	17	70
		Rubber	—1	2	72	23
Cambodia	10	Rice	29	21	14	55
		Rubber	6	7	44	29
Jordan	10	Natural phosphates	16	17	18	26
		Tomatoes	10	10	12	10
Peru	10	Fish meal	c	58	1	22
		Cotton	6	2	27	13
Trinidad and Tobago	9	Petroleum	10	d	77	82
Panama	9	Bananas	4	2	71	46
		Petroleum products	c	c	—	33
Hong Kong	9	Textiles and clothing	11		38	44
Jamaica	9	Sugar	5	3	34	24
		Alumina	14	16	15	23
Lebanon	9	Fresh fruit	8	19 <sup>f</sup>	17	19
		Beans	4	—	10	7
Surinam	7	Bauxite	7	3	79	78
Nigeria	7	Petroleum	c	d	—	21
		Peanuts and oil	5	3	22	19
Honduras	7	Bananas	3	5	55	40
		Coffee	5	8	20	18
Philippines	7	Coconut products	5		39	60
		Wood	14	12	11	36
Thailand	6	Rice	5	5	41	35
		Rubber	2	6	25	16
Argentina	5	Meat	4	4	24	23
		Wheat	5	6	21	21
United Arab Republic	4	Cotton	3	2	72	53
		Rice	c	9	—	10
Pakistan	4	Jute and jute products	2	—2 <sup>g</sup>	46	34
		Cotton	—3	—	25	12
Mexico	4	Cotton	—3	—1	30	17
		Coffee	—2	2	13	8
Venezuela	4	Petroleum	6	4 <sup>e</sup>	95	93
India	3	Jute products	3		19	19
		Tea	—1	—	21	14
Bolivia	3	Tin	5	—3 <sup>h</sup>	74	86

Table 50. Developing countries: growth in exports, total and main commodities, 1955-1965 (continued)

Country <sup>a</sup>	Growth in value of total exports, 1955-1965 (annual percentage rate)	Main items, 1964-1965	Principal exports commodities <sup>b</sup>			
			Growth, 1955-1965		Proportion of total exports	
			Value (Annual percentage rate)	Quantum	1955-1956 (Percentage)	1964-1965
Chile	3	Copper	d	3	72	67
		Iron ore	d	23	2	11
Brazil	1	Coffee	-3	-1	65	48
		Cotton	-1	3	7	7
Burma	—	Rice	-2	-3	75	63 <sup>1</sup>
		Oil-seed cake and meal	10	13	3	6 <sup>1</sup>

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Yearbook of International Trade Statistics*; Food and Agriculture Organization of the United Nations, *Trade Yearbook, 1966* (Rome); International Monetary Fund, *International Financial Statistics*.

<sup>a</sup> Countries are ranked in descending order of increase in total export value.

<sup>b</sup> Based on data in current dollars, except for growth in quantum. Growth rates are calculated as compound rates

between first two years and last two years of period. In a few cases the period is 1956-1963 or 1956-1964.

<sup>c</sup> Exports of item were nil or negligible at beginning of period.

<sup>d</sup> Exports are not available in comparable categories for 1955-1956.

<sup>e</sup> Crude petroleum.

<sup>f</sup> Major items.

<sup>g</sup> Jute only.

<sup>h</sup> Tin ore.

<sup>1</sup> 1963-1964.

Table 51. Developing countries: growth in exports of manufactures,<sup>a</sup> 1955-1965<sup>b</sup>

Country <sup>c</sup>	Growth in exports		Ratio, manufactures to total exports	
	Total (Annual percentage rate)	Manufactures (Annual percentage rate)	1955-1956 (Percentage)	1964-1965 (Percentage)
Republic of Korea	24	71 <sup>d</sup>	13 <sup>d</sup>	54 <sup>d</sup>
Israel	17	21	53	72
China (Taiwan)	16	60	5	48
Iran	13	10 <sup>e</sup>	34	27 <sup>e</sup>
Jordan	10	16	8	15
Trinidad and Tobago	9	11	78	85
Hong Kong	9	11	76	87
Jamaica	9	14	11	17
Lebanon	9	-6	31	9
Surinam	7	8	7	8
Nigeria	7	7	2	2
Honduras	7	14	7	13
Philippines	7	29	2	11
Thailand	6	4	8	7
Argentina	5	4	11	10
United Arab Republic	4	14	10	23
Pakistan	4	24	8	35
Mexico	4	6	15	20
India	3	5 <sup>f</sup>	44 <sup>f</sup>	46
Brazil	1	6	6	10

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Yearbook of International Trade Statistics*.

<sup>a</sup> Manufactures consist of the following SITC categories: 012, 013, 032 (meat and fish, dried, tinned or prepared); 046, 047, 048 (flour, milled cereals and preparations); 052, 053, 055 (dried, preserved or prepared fruits and vegetables); 062, 073 (preparations of sugar and chocolate); 091, 099 (margarine, shortening and food preparations, nes); 11 (beverages); 122 (tobacco manufactures); 431 (processed oils and fats); 243, 251 (shaped wood and pulp);

266, 267 (synthetic fibres and textile wastes); 332 (petroleum products); 5 (chemicals); 6 excluding 67 and 68 but including 681 (manufactures classified by material); 7 (machinery and transport equipment); 8 (miscellaneous manufactured articles).

<sup>b</sup> Rates are calculated as compound rates between first two years and last two years of period; based on data in dollars.

<sup>c</sup> Countries are ranked in descending order of increase in value of total exports.

<sup>d</sup> Growth rate, 1958-1965; 1958 and 1965, respectively, for ratios.

<sup>e</sup> 1963-1964; growth rate, 1955-1964.

<sup>f</sup> 1957-1958; growth rate, 1957-1965.

pansion in exports of manufactures was more broadly based, as in China (Taiwan), Hong Kong and the Republic of Korea.

Countries that have achieved large increases in exports of manufactures have generally done so through the development of a diverse range of products. Although certain products or product groups have contributed more frequently than others to increases in exports, individual countries have benefited from the development of a fairly wide range of manufactures, from the comparatively simple (preserved fruits and plywood) to the complex (electrical machinery). Among the items figuring prominently in the exports of several such countries are chemicals, textiles and clothing and petroleum products (see table 52).

Several categories of countries may be distinguished in respect of their development of manufactures exports. Some countries have concentrated successfully on the export of a manufacture closely associated with a particular resource, such as Iran (wool carpets) and Trinidad and Tobago (petroleum products). Another group of countries has developed a successful manufactures export sector as an outgrowth of its domestic industrialization effort, as in the case of China (Taiwan) and the Republic of Korea. In a third group of countries, where a fairly advanced stage of industrialization has been reached, a market for capital goods or sophisticated engineering products has been developed, as in the case of Argentina, Brazil and Hong Kong. This has so far been on a rather small scale, but in a number of instances high rates of expansion have been achieved.

#### *Export policies*

Both demand and supply factors have determined the export fortunes of developing countries. Some of the factors operating on the demand side have been referred to elsewhere in this *Survey* (see especially chapters I and V). They include the growth in the world economy itself, the income and price elasticities of demand for the various commodities exported by individual countries and the commercial policies practised by trading partners. Other determinants of export performance lie more within the options open to the developing country itself. It is on these factors, which operate mainly on the supply side, that developing countries have policy decisions to make and strategies to formulate. Government policies to influence export supply may be general (as in the case of most monetary and fiscal measures) or specific (as in the case of the incentives offered to individual exporters). As indicated in chapter II, a development programme based on import substitution and development of local industry can have unfavourable results on the price competitiveness of exports quite independently from those stemming

from inflationary pressures. An indiscriminate industrialization effort may spread the country's resources too thin, with a resulting failure to develop industries in which it has a comparative advantage. This is less likely to happen if, early in the industrialization process, a degree of export orientation is considered in designing governmental policies. If industrialization policies are outward-looking, Governments tend to be more aware of price competitiveness and its prerequisites in both economic and monetary aspects.

The experience of some of the countries that have succeeded in expanding their exports of processed and manufactured goods suggests that an open economy provides a more promising base than does a closed one. It is easier to draw on new technology from abroad and to keep the domestic industry in line with changes on external markets. Among the features making for a favourable climate for a new industry is the development of appropriate infrastructure, including facilities for industrial research and training and market research. The recent development of the export sector in such countries as China (Taiwan), Israel, Mexico, Peru and Republic of Korea indicates that a favourable environment for new industries includes relative monetary stability. A system of export incentives—through favourable tax treatment, for example—can also contribute to rapid exports growth.

China (Taiwan) is one of the countries providing examples of successful diversification and exports growth adopted consciously as a principal objective of economic policies. The industrialization process was based initially on import substitution and required increasing imports of raw materials and capital goods as well as larger markets for its output. Because of the increasing need to import, exports become an imperative goal of development. The Government adopted a number of measures to attain this goal. It undertook to diversify its export products, open new markets, improve quality by strict inspection, avoid wasteful competition among exporters by promoting unitary price quotation and unified export operations. A number of incentives were offered and necessary infrastructure facilities were provided. Export promotional measures were intensified. The resultant diversification proved very successful. While sugar and rice accounted for 70 per cent of total exports in 1950, textiles and cement have since emerged as major export industries, with canned foods, plywood, paper, chemicals and electrical appliances also becoming important foreign exchange earners.

A number of countries have sought to promote exports through various incentives. Among the more effective has been the provision of credit on favourable terms. This has frequently taken the form of relatively long-term loans at comparatively low interest rates for financing imports used directly as

Table 52. Developing countries: growth in exports of main manufactures, 1955-1965<sup>a</sup>

Country <sup>b</sup>	Growth, manufactures exports (annual rate)	Item	SITC category	Value, 1964-1965 (millions of dollars)	Growth rate (annual rate)	Ratio to total manufactures exports	
						1955-1956	1964-1965 (Percentage)
Republic of Korea <sup>c</sup>	71	Miscellaneous manufactured articles	8	34	a	7	37
		Plywood	631.2	18	..		19
		Cotton fabrics	652	11	31	42	11
China (Taiwan)	60	Textile yarn and fabrics	65	45	..		21
		Preserved fruits and vegetables	053	30	..		14
		Cement	661.2	11	a	—	5
Philippines	29	Miscellaneous manufactures (mainly clothing)	8 (841)	28	31	27	33
		Preserved fruit	053	12	..		14
		Lumber	243	7	..		8
Pakistan	24	Textile yarn and fabrics	65	134	..		76
Israel	21	Diamonds, cut and polished	667.2	145	23	44	51
		Miscellaneous manufactured articles	8	25	..		9
		Chemicals	5	21	..		7
Iran <sup>c</sup>	10	Petroleum products	332	241	11	75	83
		Woollen carpets	657	29	7	16	10
		Dried fruit (grapes)	052	9	4	7	3
United Arab Republic	14	Textile yarn and fabrics	65	82	14	64	62
		Petroleum products	332	23	22	9	17
Jordan	16	Cigarettes	122	1.4	41	8	46
		Miscellaneous manufactured articles	8	0.6	..		19
Honduras	14	Lumber	243	9	11	78	61
		Chemicals	5	2	36	3	12
		Miscellaneous manufactured articles	8	2	24	5	10
Jamaica	14	Miscellaneous manufactured articles	8	9	40	4	26
		Preserved fruit	053	7	9	29	20
		Beverages	11	5	4	35	16
Hong Kong	11	Clothing	841	301	19	17	32
		Textile yarn and fabrics	65	172	3	33	18
		Electric machinery, apparatus and appliances	7	46	26	1	5
Trinidad and Tobago	11	Petroleum products	332	310	10	95	91
		Chemicals	5	19	29	1	6
Surinam	8	Plywood	631.21	2	0.7	88	47
		Lumber	243	0.5	2.5	20	13
		Miscellaneous manufactured articles	8	0.4	4	12	9
Nigeria	7	Lumber	243	4	6	42	36
		Wood and cork manufactures	63	3	2	43	28
Brazil	6	Lumber, conifer	243.2	50	1	53	34
		Machinery and transport equipment	7	24	28	3	16
		Chemicals	5	16	6	10	11
Mexico	6	Chemicals	5	48	20	8	22
		Articles of silver	681	30	1	22	14
		Miscellaneous manufactured articles	8	20	8	8	9
India <sup>d</sup>	5	Textile yarn and fabrics	65	569	6	68	73
		Miscellaneous manufactured articles	8	44	12	3	6
		Chemicals	5	23	12	2	3
Argentina	4	Meat, tinned or prepared	013	56	—2	65	39
		Quebracho extract	532	16	—6	25	11
		Machinery and transport equipment	7	17	..		12

Table 52. Developing countries: growth in exports of main manufactures, 1955-1965<sup>a</sup> (continued)

Country <sup>b</sup>	Growth, manufactures exports (annual rate)	Item	SITC category	Value, 1964-1965 (millions of dollars)	Growth rate (annual rate)	Ratio to total manufactures exports	
						1955-1956 (Percentage)	1964-1965 (Percentage)
Thailand	4	Preserved vegetables	055	16	17	14	39
		Lumber	243	9	-6	58	24
		Silver, platinum etc.	681	3	8	6	9
Lebanon	-6	Aircraft and parts	734	3	21	4	41
		Articles of asbestos cement	661 83	1			21

Source: Centre for Development Planning, Projections, and Policies of the United Nations Secretariat, based on United Nations, *Yearbook of International Trade Statistics*.

<sup>a</sup> For definition of manufactures, see table 51, foot-note <sup>a</sup>. Rates are calculated as compound rates between first two years and last two years of period and are based on data in dollars.

<sup>b</sup> Countries are ranked in descending order of increase in value of manufactures exports.

<sup>c</sup> 1958 replaces 1955-1956 and 1965 replaces 1964-1965 throughout; growth rates apply to period 1958-1965.

<sup>d</sup> Item was nil or negligible in 1955-1956.

<sup>e</sup> 1963-1964 replaces 1964-1965 throughout; growth rates apply to period 1955-1964.

<sup>f</sup> 1957-1958 replaces 1955-1956 throughout; growth rates apply to period 1957-1965.

inputs for export products, or to cover other costs. Such countries as China (Taiwan), Israel, Mexico, Pakistan and Republic of Korea have successfully encouraged exports through such measures.

Through a number of specialized institutions, Mexico provides assistance to foster agricultural exports as well as exports of manufactures. Manufactures exports to Central American countries are encouraged through the extension of credit to importers in the latter countries. One Mexican financing institution finances the export of manufactures through resources drawn mainly from duties on luxury imports.

Prior to 1966 Israel offered cheap credit and tax refunds to selected export industries; in that year, it introduced a far-reaching export-incentive system covering all export products. The Government offered credits at very favourable rates. To stimulate selected export industries, special export subsidies were offered on a flexible basis, being increased or decreased according to the profitability and relative importance of the industry. In addition to general export incentives, agricultural exports also receive certain special subsidies in the form of grants and loans on favoured terms. The system of incentives in Israel has increased the profitability of exports relative to domestic sales, and has contributed substantially to the country's impressive export performance.

In Pakistan a system of export credit guarantees encourages banks to extend credit to exporters to meet their manufacturing costs. Under an export bonus scheme, exporters of non-traditional primary exports are granted a bonus on their foreign exchange earnings.

Favourable tax treatment is another technique used extensively by developing countries to encourage exports. Export sales are often exempted from taxation; in some instances export firms enjoy

more liberal depreciation allowances. A common fiscal incentive is the refunding of duties paid for imports needed by an exporting firm in the manufacture of the exported commodities. In Mexico, a series of measures has been introduced to promote export of industrial goods. They include exemption from or reduction of export duties, rebate of duties paid for imports of raw materials, and exemption from federal income-tax. In Israel, fiscal incentives include refunds of several categories of duties and fees, including customs duties on direct inputs for export production, wharfage fees on exports and on imports used in production for export. In addition, rebate on property tax is offered to firms exporting at least 30 per cent of their annual output.

China (Taiwan) has recently introduced a comprehensive programme of export promotion covering fiscal and financial incentives, market promotional measures and the cultivation of trade relations. Exporters are offered rebates of harbour duties and commodity taxes on exports of processed agricultural products. Taxes on imports of raw materials are offset when the finished products are exported; exporting companies are exempted from income-tax for five years if their export volume is more than half of their annual production; and business taxes are not levied on export sales. Export enterprises receive export loans at half the interest rate applicable to ordinary loans. Advance exchange settlements (local currency loans required for domestic procurement of raw materials) and foreign currency loans for import of raw materials needed for processed export products are provided.

In countries where import restrictions are substantial and foreign exchange is scarce, import licences and availability of foreign exchange constitute important export incentives. Recently, for instance, the Republic of Korea, to stimulate exports, has favoured exporters in the issuance of foreign exchange permits, while Indonesia and Pakistan

have allowed exporters to retain high proportions of foreign exchange earnings.

Exporters in most developing countries suffer from a lack of familiarity with, and sometimes of interest in, foreign markets. This lack can be made good by special services offered by the Government or other public or private institutions. These services include information about foreign markets, organization of visits and fairs abroad, advertising, market research, storage and transportation facilities. Encouragement of co-operation in sharing marketing and other expenses among small export enterprises has also been found helpful by some countries.

Mexico has instituted a variety of measures to inform, consult and assist exporters. The Centro Nacional de Información sobre Comercio Exterior collects and distributes information on foreign markets, assists new medium-sized and small exporters, helps them to organize export associations to share marketing costs, and supports the participation of exporters in international fairs and exhibitions. In China (Taiwan), a Trade Promotion Department supports small and medium-sized enterprises in export marketing by contributing trade information and market analysis, by assisting product quality improvement and by aiding in international trade fairs and exhibition activities. Training in marketing research and the wide use of mass com-

munication media are also extensively employed in export promotion. The Government of Israel provides subsidies for advertising costs, the maintenance of offices abroad and research and development for new export products, and participates in underwriting certain transportation costs. Israel also grants bonuses to marketing companies that handle exports of small producers. The Government of Peru has encouraged the formation of export co-operatives designed to carry out the direct sale of raw materials abroad, while Thailand has conducted export market surveys, organized international fairs and introduced standardization and quality control of exports.

This brief review of recent policy measures is not intended to suggest that the various devices that have been adopted are necessarily wise or well-founded. They are cited merely to show what certain developing countries have found advisable to do in their own particular cases. The point at issue in the present context is merely the need that faces every developing country to scrutinize the policies that bear on the export sector. In some cases, the removal of a disability—such as an unduly high rate of tax or a tariff policy which tends to inflate the cost of inputs—may be as important as the provision of more positive incentives. And in all cases, the export sector is too strategic an element in the country's economic development to allow its problems to go by default.

## Chapter IV

### DEVELOPMENT PLANNING: FUNCTIONS AND LIMITATIONS<sup>1</sup>

One of the conclusions emerging from the review of recent experience attempted in the foregoing chapters is the great diversity not only among the developing countries but also in the actual process of development. This reflects the fact that although many long-term objectives are held in common—notably the desire to accelerate the rate of increase in total production and in *per capita* incomes—yet there are wide differences in the shorter-term ends being sought by individual countries and hence in the context and timing of their development plans and programmes. This in turn reflects differences not only in the range and relative recalcitrance of the obstacles facing them but also in the seriousness and intensity of the development effort being mounted.

In terms of its operational objectives, economic development is rarely limited to the process of raising total production or total incomes or even *per capita* income. Improvement in the level of living is invariably one of the aims, but this may be thought of not only in terms of the volume of goods and services available per person but also as including a number of things that are less readily quantified—a higher level of gainful employment, a lessening of the more arduous forms of labour, a more equal distribution of wealth and of incomes, a greater security, a healthier life and so on. Other common objectives refer less to current levels of consumption than to the foundations of a better society in the future—a higher level of literacy and scientific attainment, a more solid infrastructure, a more viable economy in terms of external economic relations.

In the present context, the fact of this multiplicity of objectives is more significant than their actual nature: it implies choices and the question of priorities. This is also true at the other end of the development chain: there are many obstacles impeding the development process but, although in one form or another some of them inhibit progress in almost every developing country, their relative im-

portance differs considerably from country to country and also from time to time. In one sense, thus, the development process consists very largely of the correct identification of bottle-necks and the devising of the most effective strategy to overcome them. This again presents complex questions of priority.

The strategy for tackling obstacles is necessarily a technical matter, but it can be formulated only in the light of the decisions made in regard to objectives. Resolution of these two interdependent sets of choices is, in abstract terms, the essence of the development problem. Each developing country, however, has to face the problem in its own unique concrete operational detail.

Decisions being called for both in respect of objectives and in respect of obstacles and the means of surmounting them, a developing country has no alternative if it is to accelerate its rate of growth in the chosen way but to approach the problem as systematically as possible. This is, in essence, the function of planning: to ensure that the objectives are mutually compatible, that the obstacles to their attainment have been correctly identified, that the strategy adopted to overcome them is feasible and optimal, that the policy components of that strategy are fully consistent. It is necessarily a government function and in some countries it has been focused on the public sector, reflecting in part the extent to which the Governments concerned exercise direct control over productive capacity and in part the weakness of the market mechanism and entrepreneurial response in the private sector.

Though planning may be most cogent and detailed in respect of the development of the resources that are at the disposal of Governments, it can hardly be limited to the public sector. Both the objectives and the obstacles concern the economy as a whole, and, even in the absence of longer-range planning, the Government has the responsibility of managing the economy on a shorter-term basis. And, to a considerable extent, it is the instruments of economic policy available to Governments for short-term control that have to be used to move the economy towards its longer-run objectives. Thus planning cannot consist only of the selection of broad long-term aims and the elaboration of strategies for

<sup>1</sup> This chapter attempts to distil the recent experience of developing countries in the field of development planning. For a more general appraisal of the problems of planning, including in particular the experience of the centrally planned economies, see *World Economic Survey, 1966, Part One, Implementation of Development Plans: Problems and Experience* (United Nations publication, Sales No.: 67.II.C1).

attaining them; it must also provide a workable basis for the day-to-day regulation of the economy so that short-term policy decisions are kept as consistent as possible with the longer-term objectives.

The art of planning is a very new one and, in practising it in the post-war period, the developing countries have had to contend not only with handicaps rooted in their individual history and circumstances but also with the more pervasive problem of their vulnerability to exogenous forces. Impulses received through export markets, import prices and the flow of external capital have been largely beyond their control and thus have entailed a continual series of adjustments—often of an essentially defensive nature—greatly complicating the task of keeping short-run measures compatible with longer-run aims.

Notwithstanding the difficulties, the desire to “develop” has induced one country after another to set up a plan framework within which the compatibility of objectives and the consistency of policy measures can be tested. In some cases, especially in countries with a more sophisticated private sector, this has involved chiefly a set of projections to provide guidelines to private decision making. In others, it has been a more comprehensive and detailed exercise with specific sector and industry targets. In others again, it has focused principally on the acquisition and disposition of government resources. In all cases, it has involved a more systematic approach to the development process and a continuing attempt to use the instruments of economic policy in a consistent fashion.

To what extent this planning effort has in fact succeeded in accelerating development is a question that can be answered only case by case. There is no general external criterion by which “success” can be measured. Though all the many changes that the development effort has brought about may in fact result in (or be accompanied by) a measurable increase in the rate at which the over-all volume of production is growing, a single indicator of this nature may reveal little or nothing of the degree to which most of the desired development objectives have in fact been achieved. The recorded gross domestic product growth rate in many developing countries may reveal more about the trend in their major export activity than about any of the qualitative or structural achievements or failures by which their planning effort should more properly be judged and on which their development may well in the long run more directly depend.

While an examination of recent planning efforts in the developing countries may not yield any proved formula for economic development, it does provide a guide to the problems that have arisen both in formulating and in executing development policies.

These problems exist at two levels—that of over-all strategy and that of more detailed policy—and they exist whether or not the country has adopted a formal plan. Even the most modest effort on the part of government to bring about desired economic changes raises questions which are essentially the same in nature if not in degree as those raised by comprehensive planning for a mixed public-private economy. They are the problems that emerge in the selection and use of policy instruments and in fitting them into a consistent and effective mix in the light of identified bottle-necks and selected objectives.

#### THE PURPOSE AND PROBLEMS OF PLANNING

Given the difficulties that the developing countries face, the need to use their limited resources to maximum effect is imperative if the pace of economic development is to be accelerated. In a basic sense, planning is no more than an attempt to do just that. It involves four distinct but interrelated processes—the selection of the principal goals to be aimed at (including both long-term and shorter-term targets), the identification of the obstacles that stand in the way of their attainment, the formulation of a set of policies to overcome these obstacles and the deployment of the various policy instruments to that end. The essential feature of the planning exercise lies in its attempt to see the development problem as a whole so that the effort put forward will yield optimum results; this means that the ends that are sought must be made mutually compatible, the strategy implicit in the policy mix coherent, and the use of the instruments of policy consistent.

Recent experience in the developing countries has shown that the very task of getting an over-all view of the economy presents numerous difficulties—lack of data, strong departmental separateness in the government apparatus, absence of a history of collaboration between public and private sectors, the physical and economic remoteness of certain parts of the private sector, vulnerability to climatic changes internally and world market changes externally. By the same token, the very effort to bring the economy within the purview of a plan has often had important beneficial side effects unconnected with the merits of the plan or with the success of its implementation. It has accelerated the assembly of the principal items of economic intelligence; it has resulted in the creation of machinery to bring government economic activities into a more coherent framework; it has helped to speed up institutional reforms in such fields as tax gathering, the mobilization and channelling of domestic savings, and the integration of external aid with internal resources.

These products of the planning effort need to be taken into account in any assessment of recent

achievements. For on the whole, the past ten years have been a period of learning and experiment in most developing countries. Too often plans have been of a paper variety, lacking the degree of realism necessary to permit their implementation. There have been plenty of targets but few carefully thought out development strategies. Some of the more recalcitrant obstacles have been avoided rather than tackled and, as a result, other objectives have been missed because of a failure of domestic food supplies or a deficiency of foreign exchange. Arrangements for short-term adaptation have proved inadequate and this has sometimes necessitated the abandonment of the original longer-term objectives. At this stage, it is likely to be more useful to pick out common and recurrent problems in planning procedures than to examine in detail the results achieved through particular plans. For, in the period immediately ahead, the main benefits likely to be derived by many developing countries from planning are those that are inherent in the process itself: whether particular designated targets are attained or not may be less important than the inculcation of new habits of thought regarding the economy as a working organism and the gathering of new information regarding the interrelationships among its components.

#### *Ensuring consistency in objectives and policies*

While the setting of a single target in the form of a gross domestic product growth rate would not seem to have been very helpful, planning problems multiply with the number of more detailed goals. In the less developed economies, experience suggests that there is some advantage in the setting of a number of physical targets in an easily comprehensible fashion—the output of food-grains and a few other basic consumer items, the number of new dwelling units to be built, the capacity of new power stations, the size of school enrolment and so on. Simple targets of this nature tend to be more effective in mobilizing both government departments and the relevant elements in the private sector than more abstract, even if equally desirable, objectives such as higher saving rates, a reduction in under-employment or a more equitable distribution of incomes.

This is not to say that a plan can be left in terms of a series of such physical targets. The critical test of whether they are all simultaneously attainable—that is, the optimization of the rate at which they are to be achieved—and their translation into policies both involve their being integrated into a more general model of the economy in which all their implications can be examined.<sup>2</sup> In particular, it is necessary

<sup>2</sup> Some countries have succeeded in using input-output analysis and other mathematical techniques in tracing through the economy all the effects of particular hypothetical changes or courses of action. But in most developing countries, data

for a developing country to see clearly the claims which the effort to achieve the targets will make on those resources already identified as potential bottlenecks—domestic savings, foreign exchange, particular skills and so on. The policies that are most necessary are those aimed specifically at loosening the constraints imposed by those bottlenecks. They have to be implemented along with the measures designed more directly to allocate (or attract, in the case of the private sector) the resources for the fulfilment of the designated targets.

The targets that are finally designated—after an iterative process to bring them and their implicit subtargets into optimal balance—must be realistic, that is, capable of being achieved if the relevant policies and measures are duly implemented. While there is some merit in setting the sights as high as possible in order to capture the imagination and carry along the population in the development effort, experience suggests that the setting of over-ambitious goals can be counter-productive. The enthusiasm that is required from those concerned needs to be nurtured for the long haul; failure to achieve publicized targets can soon spread disillusion.

Given the manifold needs of most developing countries and their limited resources, it is virtually impossible to avoid all conflicts in objectives. What is essential, however, is prompt recognition so that appropriate compromises can be made. The choice is rarely a blunt either/or, one goal or another; it is usually a question of how much of each will yield the optimum combination.

The provision of employment is a proper objective, for example, but to pursue it beyond a certain point may be so detrimental to efficiency, to the modernization of technology and even to total production that short-term jobs are created at the expense of long-term growth. A more equitable distribution of income is likewise a sound objective but it may be short-sighted to pursue it to the point where saving rates for the economy as a whole are adversely affected. In other words, targets for income distribution and for savings ratios for the economy as a whole can be set only on the basis of a continuing review of saving propensities under the changing social and economic conditions implicit in the plan. Land reform may have a similar social justification, but the pace and methods of its pursuit need to be geared to its impact on agricultural production. Too great a disruption in farm organization may reduce the resources at the economy's disposal in the short run and this could jeopardize the attainment of other plan goals. Industrialization is likely to be an objective in all developing countries, but

limitations and the narrowness of the economic base—which tends to make the relationships between variables rather unstable—still leave room for a good deal of intuitive thinking and informed estimating.

pace and methods are again the crucial policy issue: over-rapid growth of high-cost industries can greatly accentuate the bottle-neck that an inadequate export performance already constitutes. And in the most general sense, in so far as the process of economic development involves change, and change is seldom likely to be painless, what is up for decision at each stage is degree and speed.

Much the same is true of the policies and the instruments used to give effect to them. As indicated in the next section of this chapter, those instruments are in use anyway, whatever the development strategy; what is required is the assembly of a suitable battery operating consistently in the desired direction. Recent experience in the developing countries reveals three main areas of potential difficulty and conflict: the first is what might be called the area of ignorance, the second involves competition between the public and private sectors for the use of resources, and the third is the time factor and the problem of weighing the future against the present.

To achieve consistency in the use of policy instruments would be difficult even if their precise effect were well known and capable of accurate quantification. This is far from the case in the developing countries. Knowledge about the response to various forms of incentive and deterrent is very sketchy and where the development process is itself fomenting changes in attitudes and behaviour as well as in economic activity, there are obviously inherent reasons for uncertainty. On the whole, recent history reveals a tendency for Governments to take too sanguine a view of the probable results of the use of any given instrument. Actual response has often fallen short of what seems to have been expected or desired. The explanation seems to lie partly in the inertia of much of the private sector and partly in the fact that the economic environment has often been a rather rough one in which the impact of particular measures has been offset or subsumed in reactions to much stronger forces. In allowing for the effect of a specific policy, therefore, it has often been necessary to postulate a range of response.

Governments require resources to carry out that part of the development plan vesting in the public sector. Hence, whenever a tax measure—direct or indirect—is to be deployed as inducement for some course of action in the private sector, it is necessary to estimate the cost in government revenue forgone. For consistency in the battery of policy measures, all tax concessions have thus to be based on a balancing of expected response and revenue sacrifice. By the same token, tax increases designed to augment government revenue (and savings) need to be subjected to the same test. If the policy is a rise in the saving rate for the economy as a whole, a tax that reduces consumption in the private sector is a

more consistent measure than one likely to fall on resources that would have gone into investment.

There is a perennial conflict between what is desirable by way of long-run policy measures and what is necessary in terms of immediate or short-run action. Because this problem is so pervasive and because the developing countries tend to be subject to severe short-run stresses, it is a powerful reason for maximum flexibility in planning. Temporary imbalances so often call for stabilization measures that are in conflict with longer-term policies that the time-table for the attainment of plan targets has to be provided with some adjustment mechanism if it is to retain its essential purpose of guiding the movement of the economy. Prompt reaction to short-term needs can hardly be avoided: it is often mandatory because of the external imbalance that it involves, and, in any event, its neglect might soon jeopardize the longer-term objectives of the country. This adds greatly to the importance of a mechanism for annual programming such as is discussed in the final section of this chapter.

#### DEPLOYING THE MAIN INSTRUMENTS OF ECONOMIC POLICY

The instruments of economic policy are broadly divisible into those impinging directly upon the economy and those that operate by providing incentives and disincentives to influence decisions and behaviour in the private sector. Almost all the developing countries make use of all the available instruments; differences are in the intensity of use, the mix deployed at any one time and the effectiveness of administration. There is a discernible tendency, however, for the relative importance of indirect instruments to increase with the degree of development of the economy and the level of *per capita* incomes. The more sensitive the market mechanism, the more reliance can be placed on price and profit stimuli.

The effect of a stimulating instrument depends not only on the intensity with which it is used—the height of a tax rate or the extent of a concession—but also upon its relationship with other instruments. The impact that tends to determine action is the combined impact of all the policy instruments impinging at the particular point of decision. Nor is the impact a proportionate one along the scale of intensity: a doubling of a particular incentive is unlikely to lead to a doubling in the response, and experience suggests that it is easier to devise a deterrent to a given decision than a stimulus that will induce it.

The choice of policy mix depends not only on the state and circumstances of the economy in question but also on the nature and combination of longer-run objectives being pursued. There is little doubt that

the major explicit, abstract, long-run objective of most developing countries in recent years has been to accelerate the rise in *per capita* incomes. Other economic goals have tended to be regarded as secondary and hence more distant, or even derivatory in the sense that they are expected to flow from whatever success is achieved in raising incomes. In some instances, however, the higher-income objective has yielded to the imperatives of national defence or even to the achievement of certain institutional changes. There has also been occasional ambivalence about the primacy of an employment objective: where urban unemployment has been rising at a politically unacceptable rate, the desire to create more jobs has affected decisions about production techniques, investment and relative prices more potently than the desire to raise average incomes. The lifting of consumption levels has also been a prime goal from time to time, though subject in most instances to the achievement of an even higher rate of increase in saving.

In the 1950's, the objective of raising *per capita* incomes was often implicitly assumed to be equivalent to that of increasing total production of goods and services, but more recently population has entered as an independent variable, and restraint on population growth has come to be regarded in some countries as a policy aim complementary if not parallel to that of raising total income.

Most development plans set forth the basic elements of the economic strategy by which the various objectives are to be attained. If one of these objectives is an increase in income the strategy would have to provide for the necessary expansion in investment and hence a rise in savings and an improvement in the allocation of investible resources. This in turn implies targets for imports and therefore for exports (or the inflow of capital in one form or another). Thus the policies spelt out in greater or less detail in most development plans have been designed to achieve a reduction in the rate of population growth; an increase in the level of domestic savings (and in some cases foreign savings also) relative to domestic product; an increase in the level of investment; more efficient distribution of investible resources; a more efficient use of existing productive capacity, particularly in agriculture; and increased export earnings to finance the import needs of a more rapidly growing economy.

The problem facing the Government of a developing country with such a strategy mapped out in general abstract terms is how to deploy the instruments at its disposal to speed up the changes implicit in each of the policies comprising the development plan. This requires a realistic appreciation of the limitations of the various policy instruments in the circumstances in which they have to be used. For while, in principle, each developing country has

the full panoply of weapons at its disposal, in practice its choice is often severely curtailed both by the structure of the economy and the peculiar current distribution of activities and incomes and by administrative deficiencies in the public service which make it difficult to innovate and to achieve the desired degree of flexibility. A better appreciation of these problems has been one of the fruits beginning to emerge from recent experience.

### *Public investment*

Public investment in productive facilities is the most direct way in which a Government can seek to implement a plan decision regarding the nature and magnitude of capital formation.<sup>3</sup> Such investment may be undertaken for strategic or ideological reasons—because of the Government's desire to retain certain types of assets in the public sector, as was the case in the earlier plans in India. It may also be undertaken because the necessary technological expertise is not available in the private sector. It has sometimes been a matter of the size of the investment: where sufficient private capital has not been forthcoming, the Government has often been led to undertake the task of establishing the enterprise in question itself, rather than use its taxing power to raise capital for channelling into the private sector in so concentrated a form.

In one sense, decisions to allocate resources to public production projects present straightforward programming problems at the technical level. In many developing countries, however, they tend to become more complicated. On the one hand, when priorities are being determined, there are often too few projects to avoid the necessity of facing rather meaningless comparisons across sectoral boundaries. While a scheme to expand educational facilities can be programmed, the choice between a school, a hospital, a road and a flour mill is not a technical problem but one that involves the whole complex of considerations that go into the determination of development goals and strategies. On the other hand, in relation to the various constraining scarcities, there are often too many projects to avoid phasing difficulties. Among the most common in recent experience have been lags in feasibility reports and in pre-investment work, including the acquisition of land, the receipt of international bids on contracts and finalization of arrangements for financing foreign

<sup>3</sup> Public investment is also required for purely administrative purposes and for the building up of an appropriate social and economic infrastructure. The former does not raise any policy issues—unless it be the desirability of holding such non-productive investment to the minimum consistent with the efficient functioning of the civil service. The latter was discussed in chapter II. In so far as economic criteria can be applied to infrastructure projects—as in the case of power and transport facilities, for example—the considerations mentioned in the text that follows are germane to such investment also.

currency costs. Such lags have usually reflected one or other of the critical shortages—technical expertise and foreign exchange, for example—or institutional and administrative strains on the relevant organs of government, such as the public works department, not originally intended to engage in industrial construction and factory design, especially on the scale implicit in the planned acceleration of investment.

Lags have often proved cumulative, moreover, as failure to complete certain stages on time create difficulties for other capital projects. And where there are close links between projects, such delays have often resulted in tying up of a considerable volume of scarce resources in a temporarily unproductive state. Exigencies of this nature lie behind some of the wide variations, both among countries and over time, in the relationship between increases in total investment and gains in total output.

Nor have the difficulties been confined to the construction stage. Many operational problems have had to be faced, especially where Governments have previously had little experience in running market-oriented enterprises. A good deal of experimentation has been undertaken to resolve the inevitable conflict between the control the authorities feel they need to exercise over their assets and the freedom the management feels it requires to function on the market. The most common compromise has been a semi-autonomous profit-conscious entity subject to a varying degree of control over broad policy matters—generally least restrictive and by the same token least profitability-based in Latin America—but free to take day-to-day decisions.

Another major problem that seems incapable of general solution has been the relationship of such public enterprises with the private sector. The fact that a Government-owned and -supported firm has—or is widely believed to have—a competitive advantage over private concerns may serve as a deterrent to private investment. The “unfair competition” has not usually been in the matter of sales—for in most cases the public firm has been set up to produce goods not already being produced—but in respect of inputs of types of labour and raw materials that may often be very scarce. Such competition may also serve as a stimulus, however, and in many cases, the hiring and purchasing policies and activities of public firms have been a spur to private producers of the inputs and sometimes a source of improvement in respect of the quality of labour, providing training and experience not obtainable elsewhere.

The benefit to the industrialization process accruing from such public enterprises has also depended on their efficiency. Unsuitable, politically determined plant location and undue intervention in operations—particularly in price policy—have been among the

principal causes of low efficiency, though there are also many instances of poor management, stemming sometimes from the political nature of top-echelon appointments. An inefficient public firm can be a serious drag on an under-developed economy: its losses constitute a strain on the budget and its high unit costs may ramify throughout the industrial system, weakening the competitive status of other enterprises.

#### *Direct controls*

Quantitative and physical methods of achieving the desired allocation of scarce factors have been used in most developing countries. Their deployment has generally reflected a lack of confidence in the sensitivity of the market. It is frequently impossible to devise workable incentives to bring about the pattern of resource use regarded as essential to further development or, by the same token, to prevent the use of resources in certain ways. Thus direct controls have been invoked where the price mechanism could not be used with the requisite degree of certainty. Complementing other policy instruments, quantitative controls have been used to distribute the supply of a scarce resource in a predetermined manner.

The factor most commonly dealt with this way in recent years has been foreign exchange. This reflects the belief that the exchange rate and customs tariff adjustment necessary to restore and maintain the country's external balance was either so large or so uncertain in its impact on the composition of imports that it was safer to regulate the pattern of trade by exchange control and import licensing. This provided a more precise instrument for obtaining the imports required for development while defending the country's external equilibrium. Direct control over foreign exchange and imports has also been used to stimulate specific domestic activities, in particular to furnish the most exact and assured form of protection for designated branches of local industry.

Experience has revealed the dangers inherent in such controls as a long-run policy instrument. Their very precision may turn out to be a disadvantage because to exploit it effectively requires equal precision in regard to domestic investment and production. If the domestic results turn out differently from those postulated when the import quotas were allocated, the over-all commodity supply pattern may not conform at all to that required by the plan or to that implicit in the actual distribution of demand. The resultant shortages and imbalances have often exercised a serious distorting effect on the price structure and on the investment and production pattern in the next phase. The price structure can also be affected by the absolute protection provided to industries for whose product no foreign exchange

is allocated: in the long run, depending on the nature of the protected items and the extent to which they enter other industries or the consumption basket of wage earners, this too may have serious consequences for the cost structure.

The distortions of price and profitability that may follow a stringent system of direct control over imports is soon likely to be reflected in investment decisions. Imports excluded because they are judged to be of low priority from the point of view of the national economy may thus give rise to investments that are of high priority according to the private-profit calculus. It has therefore been thought necessary in some countries to extend quantitative controls to the investment process either through a system of licensing or through the allocation of credit. Because of the multiplicity of claims in an economy that is seeking to expand investment, it has proved extremely difficult to devise a workable mechanism that can apply logical criteria regarding priority within the framework of plan objectives without setting up a system of regional and sectoral checks that make for inordinate delays and tend to reduce the over-all volume of investment below what might otherwise have been achieved. Pakistan and, more recently, India have both dismantled much of their licensing apparatus because of its generally negative effects on investment.

#### *Incentive and disincentive measures*

In order to promote the development purposes of their plans, most Governments bring influence to bear on the decision-making process in the private sector by means of measures affecting profitability. Such measures usually involve some form of discrimination designed to encourage certain activities and discourage others. This is commonly attempted through the purposive manipulation of the tax system, the schedule of customs tariffs, the rates at which credit is made available and administration of selected prices and wages.

Experience has shown that the effectiveness of such measures depends very largely on the efficiency of the market mechanism as a whole: those whose decisions are to be influenced must be capable of making the calculations which show the relative advantages of the preferred course of action (or the magnitude of the penalty in the case of a disincentive). This implies not only a timely knowledge of the discriminatory measure but a reasonable awareness of alternative possibilities of action. In other words, the measures must be brought to the notice of the decision makers early enough and clearly enough for them to be taken fully into account.<sup>4</sup>

<sup>4</sup> It is significant that, in an attempt to improve the response to such measures, Turkey has adopted the practice of indicating in its annual programmes a year in advance,

To set forth these conditions is to go some way in explaining why these indirect instruments have met with only limited success in achieving their essential purpose. In most developing countries, the market mechanism is rather insensitive and, as risks are often great, potential profitability has to be very high in order to induce investment. Thus marginal differences in net return tend to be much less compelling than they are in more competitive and sophisticated markets.

Whatever their influence in changing the pattern of resource allocation, however, there is no escaping the general problem of deploying these policy instruments. Whether or not Governments try to use them to bring about desired actions in the private sector, there remains the basic question of ensuring that the fiscal system, the tariff system, monetary and credit policies, and wage and price policies are as consistent as possible with one another and lined up as purposefully as possible in support of the country's development objectives.

#### *Tax policies*

Taxation is by far the most widely used policy instrument in the developing countries, affecting not only the volume of resources drawn from the economy for public disposition but also over-all saving and investment rates and the distribution of incomes. Within the limits referred to above, the selective raising or lowering of tax rates—whether levied on commodities or on incomes—can serve as a brake or accelerator for specific sectors of the economy. At sufficiently high rates, a tax may be used to reduce or even prevent the allocation of resources for particular purposes—luxury housing, for example. Contrariwise, at low or even negative rates, factors can be attracted into selected forms of activity—export industries, for example. As indicated above, however, recent experience suggests that the differentials often have to be relatively large before they become effective in influencing investment decisions.

The larger the share of total output diverted to the public sector through taxes, the more potent is fiscal policy likely to be as a development instrument. The fact that public revenue is generally an appreciably smaller proportion of total output in the developing countries than in the more advanced countries—especially in the case of those developing countries with a large subsistence sector that is only on the fringe of the fiscal system—thus imposes another limitation on the impact of small changes in tax rates.

the precise nature, by sector and subsector, of the concessions that will be granted in respect of taxes or credit, the incentives in question having been worked out as part of a detailed analysis of prospective demand and supply conditions for individual commodities and commodity groups.

One of the reasons for the lower tax off-take is the narrow base of direct taxation in most developing countries: this tends to leave very little room for flexibility in rates. The most common device has been the tax "holiday", offering relief from direct tax obligations for a specified number of years. This has generally been designed to attract new capital, particularly from foreign investors. While a concession of this nature does not suffer from the defect of shrinking the existing tax base, it does retard its expansion, and often without assurance that the sacrifice of revenue has really influenced the decision to invest.

The heavy dependence of many developing countries on taxes levied on export activities is also a severe handicap from the point of view of the flexible use of fiscal policy. Export taxes have been successfully used to capture an appropriate share of windfall gains stemming from a rise in world market price, but in less favourable circumstances revenue suffers, and in general the fact that foreign exchange is so often a constraint makes it necessary for Governments to be particularly careful to avoid taxes and tax rates that are likely to discourage the export effort.

Use of the fiscal instrument is also limited by problems of administration. Taxes have to be levied at points that are administratively practical even if, from the point of view of fiscal strategy, these are not the most desirable. A diversified or otherwise complicated tax tends to make administration difficult and evasion that much easier. And a tax that is not adequately and fairly collected can never fulfil an incentive function.

Despite these problems, many developing countries have managed to deploy differential taxation as a guide to resource allocation. Depreciation allowances have been varied in order to encourage specific types of investment. Personal and corporate income-taxes have been set at different rates in different regions in order to affect the geographical distribution of industry. Farm incomes have been taxed more lightly than urban incomes. Income from property has been taxed at higher rates than income from labour. Such examples are not cited because of their contribution to economic development, but merely to illustrate the capacity of developing countries to use the tax weapon for purposes other than mere revenue gathering.

In assembling a battery of taxes, a double dilemma has to be resolved: the more immediate needs of social policy have to be weighed against the longer-range desiderata of economic development while at the same time the immediate needs of public revenue have to be weighed against the desirability of encouraging economic decisions that may result in greater longer-run gains. Experience provides no

general guide to the resolution of these choices. It does, however, point to the necessity of applying a set of objective criteria to each tax measure to test its consistency with long-run as well as short-run goals.

#### *Customs duties*

Like differential tax rates, the tariff structure is used in almost all developing countries as a means of influencing economic decisions. And since, as indicated in chapter III, many of the less developed countries derive more government revenue from customs duties than from direct taxes, there is an even more acute conflict between the need to maximize off-take and the desire to deploy particular duties as incentives or disincentives.

As in the more advanced countries the typical tariff profile is a downward slope from high duties on consumer goods in general and luxury items in particular to low or zero duties on producer goods and raw materials. As suggested in chapter II, industrialization efforts have usually accentuated this slope; the high rates originally imposed for revenue purposes are raised even higher to reduce imports—at the sacrifice of revenue—and afford protection for domestic producers, while the low rates on plant and equipment are reduced further in order to facilitate the local investment process. The resultant tariff tends to favour import substitution as an industrialization strategy, encouraging a broad spectrum of local consumer goods production rather than a more "vertical" structure with a larger capital goods base.<sup>5</sup>

The selection of tariff rates for capital goods is one of the trickiest questions facing developing countries in the field of commercial policy. Whether to favour the machine builders by a high rate or the machine users by a low rate can only be decided in the light of the existing industrial structure and a careful assessment of the foreseeable potential. A more balanced industrial structure is likely to be more viable in the long run, but the premature encouragement of local capital goods production may leave a legacy of high costs that may constitute a severe handicap on industries that need to export in order to maintain an optimum-sized plant. Here again the practical choice is never all or nothing and recent history suggests that, except for the very smallest of countries, a discriminating schedule of protection can be worked out for various types of capital goods on the basis of apparent natural advantages (such as local supplies of raw materials

<sup>5</sup> Essentially similar effects have been obtained under a system of direct import controls by auctioning predetermined amounts of foreign exchange for the purchase of specific categories of goods. Differences in the resultant effective exchange rates play the part of the tariff structure in the more orthodox incentive system.

and power and transport links), the size of the local market, trade arrangements with neighbouring countries leading towards closer integration and an assessment of local entrepreneurial capacity to raise the efficiency of a new enterprise at a reasonable rate.

A customs tariff may have an incentive effect on domestic producers even when none is intended. There are instances where the raising of a rate of duty for the purpose of conserving foreign exchange or increasing revenue collections has stimulated unwanted domestic investment to produce the goods in question in the wake of the resultant rise in their local price. In such circumstances, excise taxes on domestic output are a necessary complement to any raising of the duties on imports.

One very common difficulty in the use of the customs tariff as a development instrument has arisen from its institutional and procedural traditions: in many countries, government proposals for changes in duties have to run the hazard of sometimes lengthy parliamentary debate in which the existing distribution of power may tend to resist alterations favouring new activities. Attempts to speed up the process by delegation of defined tariff-changing authority to a government commission or interdepartmental body have also met with difficulties, however. Frequent movements tend to be too disruptive and hence self-defeating: upward and downward adjustments are rarely equally acceptable and a given change is not easily reversible.

Moreover, the tariff instrument has often proved to be too blunt for precision use. Duties often apply to "commodity positions" on the Brussels Tariff Nomenclature, and the authority of tariff commissions to make changes has generally been related to such groups of items. A change considered desirable for one item—because of the possibility of organizing local production, for example—may not be as appropriate for other items in the category. Consequently, it has sometimes happened that the granting of a duty increase as protection of a single factory has encouraged investment in related but less appropriate facilities, thus making for much wider cost-raising effects than need be. And even when the "commodity position" is a conveniently narrow one, a concession intended to reduce the landed cost of a particular item in the interest of one end-use may yield stimulating advantages to the item's other end-uses which may be much less desirable in terms of the development strategy being pursued. Nor has the obvious alternative procedure—namely, to grant the tariff change on a more limited case-by-case basis—proved successful. It inevitably multiplies administrative problems many-fold and poses much greater difficulties in ensuring rational and mutually consistent decisions

Some additional flexibility in the tariff structure has been obtained by the introduction of a system of selective rebates of duties that may be set generally on the high side. Though administration still constitutes a problem, by being more finely geared to specific industries or activities—goods that have been exported or that are of high domestic priority, for example—the number of cases eligible for the stimulus may be kept down to manageable proportions. A similar purpose has been served by institutions such as bonded warehouses for duty-free imports for specific manufacturing purposes, and free-port establishments for the location of export-oriented industries.

As in the case of the tax instrument, there is no universally applicable formula for using customs duties to promote development. The point exemplified over and over again in recent experience is the need to take the customs tariff into the picture when development strategy is being formulated. Duties will continue to be levied; the need is to bring them into line with other measures in the pursuit of whatever economic objectives have been chosen. And this is not a once-and-for-all matter but requires constant surveillance in the light of the changing patterns of production and trade and changes in price relationships, both internal and between the developing countries and the rest of the world.

#### *Credit policies*

Most developing countries have experienced considerable difficulty in using credit policy in the cause of longer-range economic development. In varying degree, the problems have stemmed from inadequacy of the available instrumentalities, the strong claims of Governments on available financial resources, the insensitivity of the economy to small changes in price, and the frequent preoccupation of monetary authorities with short-term equilibrium.

The traditional interest of the banks in trading activities and in transactions involving real estate and other property has tended to leave other sectors ill-provided with credit-channelling mechanisms. Even in cases where the Government's declared policy was to give priority in matters of finance to particular branches of agriculture and industry, activities involving higher profits, quicker turnover and less risk have often in fact obtained the bulk of the available credit. It has been considered necessary in some countries to influence the pattern of commercial bank lending by means of official directives setting minimum or maximum proportions of total advances going to designated categories of borrowers—not less than a fifth to agriculture in Brazil, for example. But it has proved difficult to achieve any preconceived distribution of commercial credit. Indeed, in

most cases, the credit-hungry sectors have had to be served as a matter of social policy, through specially created or sponsored instrumentalities. And, as indicated in chapter III, the building up of a capital market and of institutions capable of moving credit more freely around the whole economy may properly be regarded in many developing countries as an economic objective rather than a presently available development instrument.

The Government's own access to the credit that the central bank is able to provide has not always been used in accordance with longer-term investment priorities in the public sector. Not infrequently, it has been called on to meet current-account deficits arising in part from pricing policies and civil service employment policies that are also out of line with longer-term objectives.

The banking system's concern with restoration and maintenance of internal economic equilibrium is quite proper, indeed inescapable. The rational allocation of credit for promoting development can hardly be expected in an economy in which prices are rising very rapidly and investment decisions are influenced more by guesses about relative price movements than by the longer-term objectives of a plan. Indeed, in a relatively unstable economy, the characteristically high risks and low degree of competition often combine to raise profit expectations beyond the range that can readily be affected by marginal changes in interest rates.

In most developing countries, therefore, the rate of interest is a relatively weak planning instrument. While concessionary rates have frequently been offered for the encouragement of approved types of investment, their effectiveness has been confined very largely to the more capital-intensive projects, notably in the field of urban housing and factory construction.

The availability of finance, rather than its cost, has usually been the determining factor. This has tended to make such instrumentalities as development corporations into relatively potent influences on the pattern of investment, especially if they have access to regular budgetary or bank funds. Given the typical shortage of capital in most developing countries, this also serves to magnify the potential effects of an inflow of foreign funds. In many developing countries, these extraordinary sources of finance tend to play a much more important role in respect of high-priority longer-term investment than does normal credit policy as such.

### *Price policies*

Governments in developing countries tend to get involved in the process of price formation in three distinct ways, each with important implications for

development. Most directly, they are concerned with the price policies of public enterprises. In many countries, they exercise a price-determining role in respect of major agricultural crops. And in some countries, they impose guidelines or engage in actual fixation in respect of key prices of goods produced by privately owned concerns.

The price policies followed by public enterprises seem to depend in part on the degree of autonomy enjoyed by the management. Where important products are involved, however, Governments are often reluctant to accept market-determined prices. In many cases, moreover, the enterprise may be in a more or less monopolistic position, and price is to some extent a policy variable. In such cases, recent experience tends to show that Governments are apt to hold prices down when they enter directly and significantly into costs—particularly the costs of consumers and of the Government itself—and to hold prices up when they can more readily be absorbed. Thus rail and urban road passenger fares have often been held low in the interest of short-run social objectives, even at the cost of subsidies to the transport enterprises. In some cases, steel and cement prices have also been kept low—in the interest of holding down the cost of public works. Electricity and telephone tariffs, on the other hand, have often been held high: their impact on costs tends to be small and their production can bring into the treasury a useful profit.<sup>6</sup>

Public pricing policies in the agricultural field have also revealed mixed motivation. One general aim has been to protect the farmer from undue instability in the price he receives for his produce. Many developing countries have set up marketing boards with this stabilizing function mainly in view. This necessarily involves decisions about the level of price. Here, there has been considerable diversity, depending in particular on whether the product concerned was for export or for sale to local consumers.

In the case of export crops, Governments have found the marketing board a useful device for capturing the windfall profits that may occur on an upswing of world market prices. The extent to which such a stabilization mechanism can also produce revenue depends in part on the buoyancy of the world price but also on the board's success in guaranteeing a producer price that is below that level but not low enough to affect production, either immediately or—no less important from the point of view of development—by deterring new investment.

<sup>6</sup> When these services are provided not by a local authority or central Government, however, but by a private company, other considerations have usually prevailed. This has been the case in a number of Latin American countries, where the common problems are those arising from price fixations that are too low by market standards. See chapter II for a discussion of the consequences.

Not all such market interventions have been profitable; indeed, in some countries, the setting of too high a price for producers has involved the disbursement of considerable sums drawn from tax revenue or bank borrowing.

Price controls of a more general nature have usually been justified on the grounds that where Government policy—in customs tariff, for example—has created opportunities for profitable investment, there is a corresponding onus on Governments to place a limit on the extent to which industries may exploit their advantages. On the whole, mopping up profits by means of taxation and forcing price reductions by liberalizing imports seem to have been more effective policies than the administration of price control.

Much of the difficulty in price policy stems from the clash between short-term objectives (social equity, levels of living, the containment of an inflationary spiral) and longer-term development objectives, which depend on appropriate rates and patterns of investment and production and can be influenced by current prices. Again there is no general method of resolving this sort of question. As immediate social needs are often of much greater political potency than the desire to attain some more distant goal, the lesson of recent experience is the need to subject such matters to the closest scrutiny, so that action taken to meet the short-range problem is as little at variance with longer-term needs as can be contrived in each case.

#### *Measures to overcome technological shortcomings*

It was pointed out at the beginning of the preceding section that the efficacy of incentive and disincentive measures depended very largely on the smoothness with which the market mechanisms themselves operated in the developing countries. The responsiveness of decision makers to the official actions that are intended to influence them depends in turn on the stability of the economy and the ease with which factors can move or be moved from one place to another or from one activity to another. Small signals implicit in a fiscal or monetary measure are unlikely to carry much weight if they are emitted in the midst of major upheavals arising from internal inflation or external market forces.

By the same token, a Government can deliberately seek to make the economy more manageable by doing its utmost to maintain economic stability and by introducing those institutional changes which will help to make the market mechanisms work more efficiently. Thus the conscious process of institutional innovation is itself an instrument of economic policy. In principle, indeed, it is the fundamental element in a development strategy, even though in

practice other actions cannot be allowed to wait on it but have to be carried out concurrently.

Entrepreneurial response to incentive measures is in part a reflection of the existing state of knowledge. However profitable a given line of action or output may be made to appear, investment will not be forthcoming unless adequate technical knowledge is available to permit the appropriate factors to be brought together and the basic mechanics of production to be put in hand. Thus an institutional innovation of high priority in every developing country is the improvement of knowledge with the object of removing, as rapidly as possible, as many of the information and technological bottle-necks as possible.

As indicated in chapter III, part of this problem lies in the appropriate expansion of educational facilities selected with a clear idea of the priority of needs, both in the short run for those already in the school system and in the longer run for those who can be prepared as teachers and instructors for the next school generation. More immediate, however, is the need to increase the effective range of knowledge of those already in the productive system. This includes knowledge of available resources, of technical processes of the management and operation of particular plants, and of the economic environment in which such plants have to function.

Considerable efforts of this nature have in fact been made in the past fifteen years, not least with assistance provided by the more advanced countries both bilaterally and through various multilateral agencies.<sup>7</sup> Surveys of natural resources and the dissemination of the results can do a good deal to widen the horizon of potential investors. Handbooks and manuals on industrial processes and the practical problems of factory organization are few and far between in most developing countries, especially where a language barrier cuts off local entrepreneurs from foreign sources of information. In many places, tradition tends to keep a son in the occupation of his father, and a special effort is needed to encourage entry into new fields, particularly when the field is a new one to the economy as a whole. Special courses in technically oriented training institutions have proved helpful, as has the sponsorship of study trips abroad.

Governments have also been able to help by organizing consulting engineering services, lack of which constitutes a drag on new investment in most developing countries. Such services can undertake feasibility studies and do the project preparation work which has so often caused delays and difficulties in connexion with foreign loans. They can also

<sup>7</sup> See chapter V for some discussion of this external assistance.

help in the establishment of common testing facilities and in the setting up of appropriate national standards for components and finished products, essential both for efficiency at home and for marketing goods abroad.

In more general terms, a development plan, though a government responsibility, and led by official actions and public sector investments, is unlikely to exert its intended influence on the economy as a whole unless deliberate efforts are made to enlist the co-operation of the private sector. As a very minimum, adequate information about government intentions—over the plan period in a general way and over the period immediately ahead in a specific and detailed way—needs to be made known to all business decision makers so that private-sector policies can be aligned rationally with the official investment and expenditure pattern. This is an area in which most official development efforts have fallen short in recent years. Though there are many examples of useful public-private collaboration in particular enterprises, mobilization of the private sector as a whole has not been successful.<sup>8</sup>

The sphere in which there is the longest tradition of government involvement in the private sector is agriculture. Research institutions, demonstration farms and extension services among the farmers are, in varying degree, tokens of official concern in most developing countries. As indicated in chapter II, their achievements have been rather unequal, reflecting in part the recalcitrance of some of the technical problems, the enormous complexity of the institutional set-up and the tendency in some countries to concentrate policy action on the industrial sector without due attention to its relevance for agriculture.

There are signs that the widespread crop failures of 1965/66 and 1966/67 have led to a reassessment of the official effort going into agricultural development. The technical break-through epitomized in the new varieties of hybrid maize and short-stemmed wheat and rice can be translated into improved production only if it is combined in an appropriate way with the requisite water and fertilizers, and this means changes in cultivation techniques and customs which in some countries are likely to require a much more intensive educational effort in the agricultural sector.

Since the repository of information and knowledge is the labour force itself, what is at stake in the efforts of a developing country to overcome its technological shortcomings is a manpower policy. This has often been a relatively neglected element

in development strategy, partly because labour as such is hardly a scarce factor in most developing countries and partly because short-term and even medium-term plans have tended to take the labour force as given, implicitly assuming that its structure could be altered only over a much longer period. While this latter assumption may be valid in a statistical sense, it is clear that a plan for creating or allocating financial and physical resources cannot be implemented without a counterpart, complementary allocation of human resources, appropriately qualified. Events have shown that shortage of skilled manpower is often a major bottle-neck. Thus a manpower policy must have short-run as well as long-run objectives.

#### THE ROLE OF ANNUAL PROGRAMMING

The need for a mechanism through which adjustments can be made both to the time-table for investments and to the measures influencing the allocation of resources such as credit and foreign exchange has been given recognition in many developing countries through the setting up of a system of annual programming. Within the framework of the longer-term plan—often formulated for a five-year span—and in conformity with its general strategy, an annual programming of action and policy can take into account the evaluation of the economy and its shorter-term vicissitudes and opportunities, occasioned by fluctuations in harvests, in the demand for its export products and in the availability of external resources.

Apart from providing this necessary degree of flexibility in development policies, without detriment to their mutual consistency or to the longer-term objectives they are intended to serve, the mechanism of annual programming has fulfilled an even more widely needed purpose by constituting a formal and functional link between the development plan, covering the whole economy and several years, and the traditional budget covering the central government sector and a single fiscal year. The importance of this link lies partly in the opportunity it furnishes for viewing budgetary actions in the context of the short-term management of the economy as a whole and partly in the relationships it helps to establish between the current-account expenditure of the Government on the one hand and the investment or capital account both in the regular budget and in the public-sector development budget.

Even in those developing countries in which development planning has evolved from the procedures followed for the building up of the capital account of the budget, events have shown the need for a closer and more organic relationship with the rest of the economy and with the budgeting of recurrent expenditure. The process of development has itself tended to involve "the rest of the economy" to an ever-increasing extent. For not only has the central

<sup>8</sup> For a discussion of some of the problems implicit in integrating the private sector into an official development plan, see *World Economic Survey, 1966, Part One: Implementation of Development Plans: Problems and Experience*, chapter III.

Government engaged in a greater amount of productive investment—extending far beyond the traditional “public works” of the ordinary budget—but, as indicated earlier in this chapter, it has often created autonomous and semi-autonomous agencies to set up and operate various types of capital facilities. Provincial and local authorities have also been encouraged to expand their investment along designated lines, including education, health, roads, soil conservation and other functions that are of crucial importance to the development of the economy as a whole. And the private sector has been drawn into the process, both indirectly through the demand for the inputs required in the public sector and directly through the setting of targets, allocation machinery for particularly scarce resources and various incentive and disincentive measures.

Without some means of bringing all this activity into a common framework, day-to-day management of the economy becomes increasingly difficult as development proceeds. Taxation is not merely a matter of raising sufficient revenue by levies on incomes and goods to meet prospective administrative costs. The whole tax structure needs to be kept in line with the changing structure of the economy itself and with the incentive, saving and foreign exchange policies required by the development effort. The measures adopted to organize and finance the ordinary budget have therefore to be determined in the light of the analysis of the prospective availability and disposition of all resources. More and more, developing countries have discovered the usefulness of an annual programming exercise for this purpose.

Where it has been furthest developed, annual programming precedes the regular budget formulation. Forecasts or projections are made of the volume and pattern of available resources, and targets are set up for investment, imports, production and exports, by sector and often by agency and by project. And it is against this background that the expenditure and revenue structure of the fiscal budget is mapped out. When the exercise is complete, it has been found useful to publish the results for the guidance of the decision makers in the private sector: this tends to increase the responsiveness of entrepreneurs to incentive measures, and helps to line up private investment and production with both longer-term objectives and the more immediate intentions for the ensuing fiscal year.

The programming exercise has also been found useful in bridging the departmental separatism which often tends to characterize the traditional budget-formulation procedures. A more coherent view is obtained of public-sector activities within the broader framework of the economy as a whole. This has been found helpful in ensuring that the implications of a particular pattern of public investments are all taken into account, thus preventing

the sort of waste that has occurred all too frequently in the past when capital facilities were built without adequate preparation for meeting their subsequent recurrent costs and inputs: schools without teachers, hospitals without nurses and an unexpectedly rapid rise in current expenditure causing awkward fiscal stringency.

The link between the fiscal budget and the development plan also helps to improve the estimating process on which the former is necessarily based. As the development plan is usually designed to effect or accelerate certain structural changes, and in the shorter-run often involves the deliberate diversion or allocation of resources to selected ends, the statistical basis for predicting tax yields, for example, tends to become even shakier than it ordinarily is in a developing country. If, in these circumstances, revenue estimates can be drawn up on the basis of development intentions—with regard to the pattern of imports or the pricing of officially produced goods and services, for example—the result is likely to provide a more realistic picture of prospective revenue, and hence a sounder basis for formulating tax and saving policies.

By the same token, more accurate fiscal budgeting enhances the Government's opportunity to pursue a sound credit policy. Advances to those elements in the private sector in which expansion is desired can be made with more assurance if the Government's own credit needs are more accurately assessed. And this in turn can ease its task of maintaining economic stability while it presses on with its plan for growth.

If it is possible to detect some notes of disillusion with the idea of economic planning in a developing country, it is not in this essentially practical area of day-to-day management. The disappointments have come from the somewhat unrealistic hopes that have sometimes been placed on a target-setting exercise. However elaborate such an exercise—and whatever care is taken to ensure the consistency of such targets—it inevitably rests on certain postulated relationships among the major economic parameters. This is an inherently flimsy base, for virtually by definition, the process of development is designed to alter the economic structure and the behavioural responses of key entities in it and therefore the very relationships that have been assumed. Experience has shown, moreover, how exogenous forces such as weather and world markets can upset the plan assumptions even more suddenly and seriously.

These disappointments point up the shortcomings of certain techniques; they do nothing to reduce the need for planning as such. Viewed as an exercise in the choice of mutually compatible objectives, the identification of relevant obstacles and the delineation

tion of a set of consistent policies to overcome the obstacles and achieve the objectives, planning remains an essential element in any serious and sustained effort to accelerate the pace of economic development. There are signs that the essentially practical

breaking down of longer-term plans into shorter segments linked to the more traditional activities and responsibilities of government may lead to a more realistic adaptation of the function of planning to the needs of the developing countries.

## Chapter V

### THE INTERNATIONAL ENVIRONMENT FOR ECONOMIC DEVELOPMENT

The economic growth of the developing countries is strongly influenced by what happens in the rest of the world. In most developing countries, the export sector contributes a major share of the total output of goods and services, especially in the market-based segment of the economy (see table 53). The import sector contributes a major share of the goods and services absorbed in fixed capital formation and in overcoming some of the specific bottlenecks to development. And because in many cases the demand for imports generated by efforts to accelerate the rate of economic expansion is apt to outrun the capacity to earn the means for paying for such imports, developing countries tend to depend on an inflow of capital.

Among the external forces affecting the export earnings of the developing countries as a group, the most significant are the growth of income in partner countries, changes in technology and the production and commercial policies pursued in the more advanced countries. The availability of capital is also dependent on the level of economic activity in the more advanced countries, but the actual flow—in form as well as in volume—is affected by tax arrangements and capital market regulations as well as by the aid policies and balance of payments policies adopted by those countries.

By historical standards, post-war conditions for trade and capital movements have been extremely favourable, at least in the aggregate. The historical test is not the most appropriate one for the purpose, however, for what was being undertaken has been without past parallel: it was—and remains—a massive effort to raise the levels of living of two-thirds of the world's population nearer to those enjoyed by the other third. And for this, the actions and policies of the more advanced countries, while generally helpful, have fallen short of what the situation and the challenge may well require if the efforts of the developing countries themselves are to be appropriately complemented.

The disparity in *per capita* income between the developed market economies and the developing countries has not been narrowed: the fractional gain in the latter's share in total output (to about one-sixth of the combined figure in 1965) was more than balanced by the rise in the group's share in

population (to over two-thirds of the total in 1965). Thus, while real output expanded between 1955 and 1965 somewhat faster in the developing countries (about 4.5 per cent *per annum*) than in the developed market economies (about 4.0 per cent *per annum*), the rate of growth in *per capita* income lagged: it rose by about 2.1 per cent in the developing countries compared with 2.8 per cent in the developed market economies. Expressed in absolute terms, incomes were rising at an annual rate of about \$3 a head (at 1960 prices) in the developing countries compared with about \$40 a head in the developed market economies.

The narrowing of this disparity in income levels cannot be regarded as an operational objective, however, at least as far as the more advanced countries are concerned. For the raising of *per capita* income in the developing countries, while chiefly dependent on the overcoming of internal obstacles to development, depends also on the rate of growth in the more advanced countries with which they trade. In general, the high-growth countries are those whose imports from the developing countries have been rising most rapidly (see table 54). And, as indicated in chapter I, it has been the developing countries with high rates of increase in exports that have registered the best rates of economic growth. Thus even a slowing down in the rate of growth in the more advanced countries would not necessarily help to reduce the difference in *per capita* incomes.

This suggests that the best contribution that the more advanced countries can make towards the development of the others is a threefold one. And the two main components—trade policy and aid policy—are both contingent on the third one, namely, the maintenance of a satisfactory rate of economic growth, for it is this that generates the demand for imports from the developing countries as well as the savings that can be made available to them. The discussion that follows is focused on trade and aid policies and their principal determinants. The growth policies of the more advanced countries are not examined; the implicit lesson that emerges, however, is that the more satisfactory its own economic growth, the less difficult is it for an advanced country to adopt generous trade and aid policies towards the developing countries.

Table 53. Developing countries: distribution according to ratio of exports of goods and services to gross domestic product,<sup>a</sup> average 1963-1965

5-10 per cent	10.1-15 per cent	15.1-20 per cent	20.1-25 per cent	25.1-30 per cent	30.1-35 per cent	Over 35 per cent
India (-1) Brazil (-3) Republic of Korea (4) Pakistan (-1)	Mexico (-1) Argentina (2) Chile (1) Mozambique (-1) Burma (-7) Colombia (-1) Ethiopia (6) Jordan (-1) Israel (6)	Madagascar (-1) Uruguay (2) Guatemala (1) China (Taiwan) (-1) Haiti (-7) Ecuador (-1) Bolivia (6) Former French West Africa <sup>c</sup> (-1) Tunisia (6) United Arab Republic (-6) Dominican Republic (2) Nigeria (-3) Paraguay (3) Syria (5) Thailand (-3) Sudan (-1)	Honduras (1) Iran (1) Morocco (5) Philippines (9) Costa Rica (3) Peru (-2) Former French Equatorial Africa <sup>b</sup> (-4) Angola (6)	El Salvador (2) Cameroon (8) Congo (-4) (Democratic Republic of) (8) Ceylon (5) Ghana (4) Panama (4) (-3)	Nicaragua (4) Sierra Leone (9) Algeria (9) United Republic of (8) Tanzania (16) Togo (8) Uganda (8) Venezuela (2)	Jamaica (9) Kenya (5) Lebanon (9) Iraq (21) Former Federation of Rhodesia and (8) Nyasaland (7) Mauritius (2) Barbados (3) Liberia (-) Guyana (17) Saudi Arabia (5) Libya (31) Kuwait (-5) Trinidad and Tobago (22)

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Yearbook of National Accounts Statistics*.

<sup>a</sup> Calculated at constant (1960) prices. In each column countries are arranged in ascending order of the ratio of exports to gross domestic product.

The figure in parentheses represents the change between 1955-1957 and 1963-1965 in the proportion of exports to gross domestic product.

<sup>b</sup> Former French Equatorial Africa includes Central African Republic, Chad, Congo (Brazzaville) and Gabon.

<sup>c</sup> Former French West Africa includes Dahomey, Guinea, Ivory Coast, Mali, Mauritania, Niger, Senegal and Upper Volta.

Table 54. Economically advanced countries: rate of increase in total production and in imports from developing countries, 1955-1965

Country or region <sup>a</sup>	Imports from developing countries, 1965		Average 1955-1965 rate of increase in		
	Total (Billions of current dollars)	Other than fuels	Gross domestic product <sup>b</sup>	Imports from developing countries <sup>c</sup>	
				Total (Percentage) per annum	Other than fuels
United Kingdom	3.9	2.6	2.9	2.7	0.9
North America <sup>d</sup>	7.5	5.4	3.4	3.0	2.1
European Economic Community	8.9	5.9	4.9	5.8	4.1
Eastern Europe <sup>e</sup>	1.9	1.9	5.9	14.1	14.1
USSR	1.1	1.1	7.4	15.9	16.0
Japan	2.8	1.8	8.8	10.3	7.6

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on *Yearbook of International Trade Statistics, 1965* (United Nations publication, Sales No.: 67.XVII.2); United Nations, *Monthly Bulletin of Statistics*.

<sup>a</sup> Arranged in ascending order of rate of increase in total production, 1955-1965.

<sup>b</sup> Gross domestic product at 1960 prices; in the case of eastern Europe and USSR, gross material product at 1963 prices.

<sup>c</sup> Import quantum.

<sup>d</sup> Canada and United States.

<sup>e</sup> Albania, Bulgaria, Czechoslovakia, Eastern Germany, Hungary, Poland, Romania.

#### SALIENT FEATURES OF THE MARKET FOR DEVELOPING-COUNTRY EXPORTS

One of the basic characteristics of the external trade of the developing countries is its close links to the markets of the developed market economies. Over 70 per cent of the exports of the developing countries go to North America, western Europe and Japan, and this proportion has not changed significantly in the past ten years. Trade with the centrally planned economies has increased fourfold in this period, but, though of considerable importance to certain developing countries, it still accounts for only about 6 per cent of the over-all total. The lagging flow has been that among the developing countries themselves.<sup>1</sup>

Though the proportion of developing-country exports going to the developed market economies has barely changed in the aggregate, the various components of this flow have responded measurably to differences in demand. The proportion of the flow going to the relatively slow-growing economies declined significantly during the ten years under re-

view: exports to North America, which constituted a fourth of the total in the mid-1950's, had dropped to a fifth by the mid-1960's, while exports to the United Kingdom dropped from 13 per cent to 11 per cent. The counterpart to this contraction was an expansion in the flow to the European Economic Community (from 22 per cent to 24 per cent of the total) and to Japan (from 4 per cent to 8 per cent).

While these changes in destination were taking place, the composition of developing-country exports was also being altered. The contribution of foods and raw materials, which had exceeded two-thirds of total earnings in the mid-1950's, had fallen to not much more than half by the mid-1960's. Correspondingly, the proportion derived from petroleum and manufactured products (other than food-stuffs) had risen by almost 50 per cent. By 1965, indeed, petroleum was yielding over 29 per cent of the developing-country export earnings—as much as all food items combined, raw and processed (see table 55).

The growth rate of earnings of convertible currencies from exports other than petroleum was not much more than 1 per cent a year in the second half of the 1950's; it rose to almost 4 per cent in the first half of the 1960's, but over the ten-year span it barely kept up with the increase in population in the developing countries (see table 56). During the first quinquennium, earnings were significantly reduced by unfavourable price movements: the average unit value of food exports to the developed market economies declined by 2 per cent a year and there was a similar decline in the case of manufactures (largely as a result of falling metal prices). These declines were made good in the second quinquennium. Eliminating the effect of these price movements leaves the growth of export quantum much smoother over time (see table 57) but

<sup>1</sup> It is difficult to assess this lag. Reported data suggest that trade among the developing countries has increased by one-third in the past ten years, its share of the total declining from about 24 per cent to about 21 per cent. This ignores unrecorded trade across frontiers, however, and makes no allowance for the merging and separation of certain groups of countries. Nor does it distinguish the impact of changes in entrepôt trade or the movement of petroleum to and from such refineries as those in Aden and the Netherlands Antilles. The value of intra-trade in fuels increased by about 2.5 per cent a year between mid-1950 and mid-1960, whereas exports to third countries rose at almost 10 per cent a year. Exclusive of petroleum, recorded trade among the developing countries has accounted for about a fifth of total developing-country exports throughout the period 1955-1965. Intra-trade in raw materials was the lagging component—it was virtually static during this period—but it accounted for a mere \$1 billion in 1965, less than 3 per cent of all developing-country exports.

Table 55. Developing countries: destination and composition of exports, 1955, 1960, 1965

Year and destination	Total (billions of dollars)	Percentage of total value of exports accounted for by					
		Food <sup>a</sup>	Raw materials <sup>b</sup>	Fuels <sup>c</sup>	Manufactures <sup>d</sup>		
					Total	Metals <sup>e</sup>	Textiles <sup>f</sup>
<b>1955</b>							
Developing countries	5.8	25	20	38	17	1	7
Rest of world	17.7	35	33	20	11	7	2
Developed market economies	17.1	35	32	21	12	7	2
Centrally planned economies	0.6	32	61	—	9	—	2
<b>1960</b>							
Developing countries	6.0	24	18	38	19	2	7
Rest of world	21.0	31	31	25	13	6	2
Developed market economies	19.8	31	29	26	13	7	2
Centrally planned economies	1.2	29	64	—	8	2	3
<b>1965</b>							
Developing countries	7.6	26	14	35	24	3	6
Rest of world	28.6	29	25	29	16	6	3
Developed market economies	26.2	28	24	32	16	7	3
Centrally planned economies	2.3	47	42	—	10	2	7

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on *Statistical Yearbook, 1966* (United Nations publication, Sales No.: 67.XVII.1).

<sup>a</sup> SITC 0 and 1.

<sup>b</sup> SITC 2 and 4.

<sup>c</sup> SITC 3.

<sup>d</sup> SITC 5 to 8.

<sup>e</sup> SITC 67 and 68 other than 681.

<sup>f</sup> SITC 65.

Table 56. Developing countries: growth rates of exports to various regions, 1955-1965  
(Percentage per annum)

Region	1955-1960		1960-1965		1955-1965	
	Total	Other than fuels	Total	Other than fuels	Total	Other than fuels
World	2.8	1.9	5.6	4.7	4.2	3.3
Developed market economies	2.8	1.4	5.4	3.9	4.1	2.6
North America	1.6	0.1	3.1	2.8	2.3	1.4
Western Europe	3.1	1.8	5.7	3.6	4.4	2.7
United Kingdom	2.8	1.1	1.4	-0.7	2.1	0.2
European Economic Community	3.6	2.5	6.7	4.3	5.2	3.4
Japan	6.6	4.3	12.6	9.6	9.6	6.9
Developing countries	0.8	1.0	4.4	5.2	2.6	3.1
Centrally planned economies	13.7	13.7	12.0	12.1	12.8	12.9
Eastern Europe	15.0	15.0	12.2	12.1	13.6	13.6
USSR	17.1	17.3	13.8	13.7	15.4	15.5

Source: See table 54.

Table 57. Developing countries: average rate of increase in the quantum of exports to developed market economies, by category, 1955-1965  
(Percentage per annum)

Category	1955-1960	1960-1965	1955-1965
Total	4	5	5
Food	3	2	2
Raw materials	1	2	2
Fuels	8	10	9
Manufactures	7	7	7

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on United Nations, *Monthly Bulletin of Statistics*, November 1967.

it does not alter the sharp contrast between food and raw materials on the one hand (with an average annual growth of 2 per cent between 1955 and 1965) and manufactures and fuels on the other (averaging 7 per cent and 9 per cent, respectively).

As indicated in chapter III, this export performance was determined to some extent by events on the supply side—agricultural difficulties in some countries, over-response to earlier high prices for certain tree crops, the opening up of new mineral deposits, import-substitution-oriented industrialization policies, over-valued currencies, shortages of export finance and so on—but it also reflects devel-

opments in the more advanced countries, not all of which are susceptible to control.

The intake of goods from the developing countries depends in the first instance on the final demand of consumers or the intermediate demand of industrial users of each of the commodities concerned. Consumer demand depends on the level and distribution of incomes and on the pattern of preferences changing continuously, though usually slowly, with working and living habits. Industrial demand is derived in part from the purchasing schedules of consumers, but it is also influenced by changes in manufacturing techniques, including not only new methods of carrying out old activities but also the availability of new materials.

In a market economy this final demand is not usually subject to direct official intervention though it is affected indirectly in many ways through the fiscal system, most notably by taxes on particular commodities, by the general redistributive influence of the tax structure and by tax incentives or disincentives to industry in respect of research or investment or other activities that may determine the composition of material inputs.

The extent to which final demand in the developed market economies is met by supplies from abroad depends in turn on the capacity of the countries concerned to produce the requisite commodities at home. This is not merely a physical question of climate and material resources; it is in large measure a matter of economic policy, reflected in the willingness of the Government to support the local producers by fiscal or other means. Production support programmes are generally complemented by appropriate trade policies designed to control entry and thus to keep the domestic market in balance at an acceptable and sometimes predetermined level of price.

In a number of cases, particularly in the case of temperate agricultural products and manufactured goods, developing-country sales to particular developed market economies are affected also by competitive supplies from other advanced countries. In some instances such supplies may originate from producers who enjoy some form of official support in these third countries.

In practice, all three sets of determinants of the demand for developing-country exports—consumer incomes and preferences, technological change and official production and commercial policies—operate simultaneously and their respective impact cannot be appraised in isolation. For purposes of exposition, however, and in order to distinguish those forces that are likely to be amenable to policy change from those that must be more properly regarded as facts of life to which it is necessary to adjust, there may be some advantage in analysing each aspect separately.

### *Adjustment to changes in demand*

While in general it is doubtless to the advantage of the developing countries for their trading partners among the more advanced countries to experience a rapid rate of economic growth, both technological dynamism and rising incomes bring their own special hazards. An increase in disposable income tends to change not only the structure of consumer expenditure but even the absolute quantities of familiar commodities in the consumer budget. And such changes may be sharply accentuated when new materials and new products begin to compete for the consumer's cash resources.

It is of significance to exporters of various food-stuffs among the developing countries that the amount of cereal and bakery products purchased for home consumption by consumers in the United States declined steadily in the first half of this century and by the mid-1950's had reached about 3.3 pounds per person per week—not much more than half of what was bought fifty years earlier. In the case of wheat, there was decline not only in *per capita* purchases but also in total consumption: average domestic disappearance for food purposes was fractionally less in the 1950's than it had been in the 1920's.<sup>2</sup> The amount of butter purchased was more or less halved in the course of fifty years (to about 0.2 pound per person per week) while sugar and sweet purchases—at about one pound per person per week—were well below earlier levels. Fruit and vegetable purchases, though above pre-war averages, seem to have started declining in the 1950's. The big increases, compared with pre-war figures, were in the principal protein foods—eggs, meat, poultry and fish—up about 60 per cent, from three pounds to five pounds per person per week.<sup>3</sup>

Nor were the changes confined to food. There are similar implications for raw material inputs in the changes recorded in clothing purchases such as the sharp decline in the use of hats and caps, ties and gloves. There was also a marked reduction in the number of handkerchiefs purchased each year, reflecting not only a change in fashion and custom but an even more significant technological change, namely the partial displacement of cotton by paper.

In most western European countries, the *per capita* consumption of coffee at the end of the 1950's was much the same as twenty years earlier: in some of the low-consumption countries, it was appreciably higher (having doubled in Italy and the United Kingdom, for example, to almost four pounds and

<sup>2</sup> See United States Department of Agriculture, *Consumption of Food in the United States, 1909-52* (Washington, D.C.) (Handbook No. 62 and supplements for 1956 and 1959).

<sup>3</sup> These examples are taken from a study by the United States Department of Labor, *How American Buying Habits Change* (Washington, D.C., 1959).

two pounds *per annum* respectively), but in several of the high-consumption countries it was lower (most notably in the Netherlands where it had declined from over thirteen pounds to under nine pounds *per annum*). In the United States, consumption reached a peak of about twenty pounds per person *per annum* in the early post-war years; by the end of the 1950's, it had dropped below sixteen pounds and total consumption was actually lower in the second half of the 1950's than in the second half of the 1940's.<sup>4</sup>

It would be realistic to conclude that the probability of slow growth in the consumption of many of the basic requirements of individuals must be taken as a datum by developing countries. Evidence already exists, indeed, that at higher-income levels, *per capita* consumption of some of the basic food-stuffs may decline at a rate in excess of the growth of population. If exporters of such commodities are to achieve a higher rate of increase in their export earnings, a special effort will be needed to expand sales in those countries in which *per capita* consumption is still low by international standards. That wide disparities exist is illustrated by the case of coffee: among the ten principal importing countries of western Europe, the highest rate of consumption at the beginning of the 1960's was as much as eight times the lowest. This itself suggests the need for inquiry into the part played by tradition, taste, fashion, trade practices, price, taxes, local production policies and so on in restraining consumption.

In the meantime, developing countries that are seeking to diversify their exports need to bear in mind the more dynamic elements in the pattern of consumer expenditure in higher-income partner countries. In the period 1953-1955 to 1963-1965, some of the imports of the major industrial countries from developing countries were clearly at the expansionary end of the consumption spectrum: among those earning more than \$100 million a year in the mid-1960's were fresh and simply preserved fish (imports of which had risen at an average of almost 17 per cent a year), fresh, chilled and frozen meat (13 per cent), preserved fruit (11 per cent), maize, largely for livestock feed (almost 9 per cent) and fresh fruit (7 per cent).<sup>5</sup>

Recent experience suggests that the impact of technological developments may also have to be taken as a datum. The search for economies in the use of raw materials, the evolution of methods of recovering and reusing scrap, the displacement of

one substance by a more suitable one—such changes are of the essence of progress and need to be adjusted to, rather than prevented. This is not to say that such changes are not frequently disruptive of older methods of doing things and of the trade patterns built up on them. It is rather to emphasize their random nature, which makes it far from certain that the cost of stopping or retarding a technical change will not be greater than that of allowing it to erode the market of an established industry.

The developing countries are often the beneficiaries of these technical advances. The improvements in blast-furnace practice and the increased use of oxygen have favoured the high-metal ores of some of the developing countries over the lower-grade product of the industrial countries. Between 1953-1955 and 1963-1965, imports of iron ore by the major developed market economies from developing countries increased at about 12 per cent a year. Similarly, the swing to oil as a source of energy in western Europe has benefited the developing countries at the expense of domestic coal producers. Between 1950-1955 and 1960-1965, coal output in the four major producers of western Europe—Belgium, Federal Republic of Germany, France and United Kingdom—declined by about 10 per cent while consumption of fuel oil increased about four-fold and exports of crude petroleum from the developing countries rose at about 9 per cent a year.

Outside the centrally planned economies, manufacturing production increased by about two-thirds between 1955 and 1965. The output of aluminium more or less doubled in this period and most of the bauxite on which the upsurge was based came from the developing countries whose exports of bauxite rose by about 6 per cent a year and of alumina by 27 per cent a year.

In contrast to these examples of the benefits accruing to developing countries from recent technological advances, there are comparable cases of loss of markets and deceleration in growth. The slow growth in production of such commodities as rubber, cotton, jute and lead (outside the centrally planned economies, only about a fourth of the rate of growth in manufacturing production between 1955 and 1965) and of wool and sisal (about a fifth of the manufacturing rate) is largely a reflection of the displacements of these products by substitutes. Imports from the developing countries by the major industrial countries were less in 1963-1965 than in 1953-1955 in the case of hides and skins (in the wake of a declining use of leather) and hardly any greater in the case of crude fertilizers (being replaced by synthetics) and of vegetable seeds and oils (saponification of which had been significantly reduced by the development of detergents). In all these instances and many similar ones, exporters in the developing countries were having to adjust to a market that

<sup>4</sup> For a discussion of the effects of changes in income and changes in price on consumption of coffee, see United States Department of Commerce, *Coffee Consumption in the United States, 1920-1965* (Washington D.C., 1961).

<sup>5</sup> See United Nations Conference on Trade and Development, "Commodity survey, 1967" (TD/B/C.1/46), table 14, for further data on selected imports from developing countries.

was shrinking, relatively if not absolutely, with all that this entails for price and receipts. By the same token, the export earnings of many countries were being affected in a way that had serious implications for the future financing of external requirements for economic development.

An examination of the changes in the composition of trade in recent years suggests that the problems induced by a reduction in the demand for a product exported by developing countries or by a decline in its rate of increase are likely to be more serious if there is a domestic industry producing part of the supply in the developed market economies than if the whole off-take is imported. For in such circumstances the domestic producers are likely to be the first claimants for protection or support in the face of the unfavourable market development, and the full burden of adjustment may fall on producers in the developing countries.

Whatever the share of the adjustment to be made by the developing countries concerned, the problem is an important one not only because of the strategic role played by exports in many of these countries and their frequently high degree of dependence on one or two such exports but also because of the dynamic nature of contemporary technology. A quickening of the pace of change could have grave implications for the development process in many of the less advanced countries.

The problems of market encroachment faced by a developing country are likely to prove most difficult when a mineral-based item is produced industrially in the more advanced country as a substitute for an agricultural commodity it traditionally exported to that market. Not only does the new product tend to be more uniform and better adapted as a raw material in other processes but the creation of industrial capacity to make it tends to alter the cost and supply situation: there are strong pressures to make full use of installed investment against which expansion of output of the natural product—at constant or even rising costs—becomes competitively difficult. Up to a point, a factory-produced substitute, being sold at a more controllable, and therefore steadier, price than the natural product, may serve as a market stabilizer, setting what is, in effect, a floor price. When factories are furnishing the bulk of the output, however, the pressure to use the capacity to the optimum, cost-minimizing extent may tend to make the position of the natural product more vulnerable: the residual demand met by the natural product is likely to fluctuate more widely than the total demand for the commodity and fall off more sharply in periods of slower industrial growth.

This appears to have happened to rubber in recent years. In terms of output, the natural product was

overtaken by the synthetic at the beginning of the 1960's and by 1967 its share of the market was less than 40 per cent. Its price had broken through the floor set by the main substitute, and in 1967 it averaged about half the 1960 figure.

Few of the developments of this nature have been as rapid or as large as the displacement of coal by oil or of natural rubber by synthetic; but in varying degree, almost all the traditional raw materials have been subject to the same type of competitive pressure. Many of the tree gums, dyes, flavourings and essences have been virtually replaced by laboratory products. In the face of man-made substitutes, most of the natural fibres have experienced a steady and continuing contraction in their share of the textile market. And among the metals, substitution by aluminium and plastics and economies in use have slowed down the increase in the consumption of lead and tin to well below the rate of growth in manufacturing production.

These changes have had their origin in the industrial countries, but new materials and new techniques for using old materials soon spread, not only among the more advanced countries but also to the developing countries. The innovations are accepted because they reduce costs or improve the quality or offer other advantages to the manufacturer or user. Even if it were possible to prevent or even slow down the process, it is doubtful whether the world as a whole would benefit. Even in the case of the developing countries, switches in raw material demand may benefit some, no less than they may embarrass others. A more practical question is how to retain the fruits of progress while at the same time shielding, at least temporarily, those whose livelihood may be injured by the changes that are involved. Even though recent history does not shed much light on this, the question must be kept before policy makers; for if, as suggested above, the pace of change is quickening, it will become increasingly necessary to devise ways and means of adapting economic organization and social institutions so as to maximize the net advantages of each technological innovation.

The most obvious response to a competitive threat is an effort to strengthen the position of the traditional product through a parallel process of research and improvement. The fact that the traditional product comes from the farm and its competitor from the factory is no reason for assuming that the dice are loaded against the former. Some of the most significant scientific advances in recent years have been achieved in the field of genetics, and the scope for industrializing farm processes is vast and in some areas almost untouched. An indication of the possibilities is provided by the modest research effort launched in the first half of the 1950's by the rubber growers in Malaysia as a result of which clones

have been developed that yield twice as much latex per acre as the older standing trees. Comparable improvements have been obtained in the case of hybrid maize and short-stemmed strains of wheat (in Mexico) and rice (in the Philippines) as a result of research efforts addressed in these instances not to a threatened export crop but to the problem of domestic food supplies. These are areas in which expertise and financial support from the more advanced countries are virtually indispensable if prompt ameliorative action is to be taken.

The research that is required is not limited to the botanical side. Recent experience has shown that the weakness of many of the traditional products lies no less in the losses that are incurred in harvesting, transporting and storing the crop and in the inadequacy of sorting and quality control relative to the requirements of user industries which, as mechanization has proceeded, have tended to become more stringent in respect to uniformity and standards. There is a need, therefore, to subject all the processes that make up the traditional export industry to searching tests of efficiency with the object of modernizing at all points at which innovations promise to improve the competitive standing of the product.

Parallel action may be required on the side of marketing and end use. Apart from the challenge implicit in countries in which *per capita* consumption of the commodity in question is far below the average, there is always the possibility of discovering or devising new outlets. A start has been made in presenting sisal and jute as decorative materials, for example, to compensate for the decline in agricultural usage, and in general a shift towards the end uses likely to be favoured by a rise in incomes would seem to be one element in an adjustment strategy.

The degree of dependence of a country on a particular export may be judged as inherently in need of reduction in the interest of more stable or more assured growth. Thus an altogether different response to a threat of displacement is diversification, that is, a deliberate reduction in the exporting country's dependence on the traditional product by the transfer of resources to other activities. Experience suggests that this is best regarded not as an alternative to the effort to raise efficiency but as a supplementary strategy, the appropriateness of which depends on a careful appraisal of the longer-term prospects of the traditional industry in the light of the trend in demand for the product in general—natural and man-made—and of the cost and quality outlook for the latter. It is presumably on the basis of such an appraisal that older rubber trees in Malaysia have been replaced not entirely by higher-yielding varieties but in many cases by oil palms. Diversification is also the strategy recently adopted

by Brazil in the face of the slow growth in coffee consumption and the steady erosion of its position as a producer by the competitive *robusta*-growing countries of Africa.

Decisions regarding the extent to which efforts should be devoted to the uplift of the old industry on the one hand or to the diversion of resources to other industries on the other, have to be taken in the producing (exporting) country. They are inherently difficult decisions, not only because they have to be based on a realistic vision of the future but also because to implement them may require a financial and technical effort beyond the capacity of any one of the exporting developing countries.<sup>6</sup> It is for this reason that the question has to be framed in a global context, as a development problem, the solution of which lies as much in the importing countries as in those whose foreign exchange earnings are at stake.

The more advanced countries are not without experience of the problem in a domestic setting: the phenomenon of declining industries is as old as the industrial revolution itself, though both incidence and urgency have increased markedly with the post-war speeding up of the pace of technological change. Ironically, the most striking examples of recent years have been in response to the competition of products from the developing countries: the contraction of coal mining in many European countries in the face of imports of petroleum, and the contraction of the textile industry—most notably in the United Kingdom—in the face of imports of cotton cloth.

One of the main activities of the European Coal and Steel Commission in the European Economic Community and the National Coal Board in the United Kingdom has been to permit an orderly contraction in the coal-mining industry. Financed largely by means of a levy on coal output and a duty on oil imports, a major adjustment effort has been mounted, involving the closing down of high-cost pits, the retraining of displaced miners, the development of mechanical devices to raise productivity in the remaining active pits, and the encouragement of other industries to open up in the depressed colliery districts.

In the case of cotton textiles—perhaps the most cogent example of what may happen when developing countries build up an export potential in a static or declining traditional industry—it was the United Kingdom that bore the brunt of the readjustment in international trade in the wake of the post-war growth of production capacity in various developing

<sup>6</sup> It is significant that in the case of the research and diversification response of the Malayan rubber industry cited above for illustrative purposes, it has been the foreign-owned plantations that have taken the initiatives, with the support of the Government.

countries, particularly in southern and south-eastern Asia. In the second half of the 1950's, the United Kingdom was importing only half as much raw cotton (about 1.5 million 500-pound bales) as it had done in the quinquennium before the war, whereas in the rest of western Europe, raw cotton imports were well up to the pre-war average of about 5 million bales. In contrast to the United Kingdom, moreover, raw cotton consumption continued to rise in the European Economic Community—4.0 million bales a year in the first half of the 1960's. At the beginning of the decade, textile imports from the developing countries accounted for over a fifth of cotton consumption in the United Kingdom compared with about 7 per cent in the EEC.

The cotton textile industry was also under pressure in the United States: imports were running at twice the 1934-1938 average in the second half of the 1950's, and in 1960 they reached the equivalent of 6 per cent of domestic mill production and exceeded exports for the first time. Earlier, the upsurge in imports had come from Japan, but after 1957 a voluntary agreement to limit shipments to specific amounts kept the supply from this source down: the bulk of the increment in the second half of the 1950's came from the developing countries which by 1960 accounted for over a third of United States cotton textile imports.

In 1959, the United Kingdom adopted the Cotton Industry Act in an attempt to consolidate and rationalize the production of cotton textiles and enable the industry to stand up to the competition of imports. As part of this reorganization, arrangements were made with Hong Kong, India and Pakistan to limit their sales to the United Kingdom to specified quantities. In 1961, the United States embarked on a similar course aimed at expanding research and facilitating modernization of the domestic textile industry, removing the disadvantage to domestic mills from a pricing system intended to encourage raw cotton exports and negotiating an international trade arrangement for avoiding "undue disruption" of domestic markets by imports.<sup>7</sup>

The problem was discussed within the framework of the General Agreement on Tariffs and Trade (GATT), and the outcome was a five-year Arrangement regarding International Trade in Cotton Textiles that came into effect in October 1962. Thirty countries became party to this Arrangement whose main purpose was to permit the exports of the developing countries to grow at a pace that was not disruptive of the domestic industry in the importing countries. The effect was to slow down the over-all rate of expansion: between 1955 and 1962, the value of textile exports from the developing countries to

the developed market economies rose erratically but rapidly at an average rate of about 11 per cent a year; this dropped to an average of about 7 per cent in the following three years. Some liberalization of the Arrangement was negotiated on a bilateral basis in certain cases, but in 1967 the Arrangement as a whole was extended for a further three years.<sup>8</sup>

A tax on a dynamic import (such as petroleum) or a quota system restraining the growth in low-cost imports (such as cotton textiles) can be regarded as a means of buying time during which the threatened industry in the importing country is reorganized and made more capable of competitive performance, if necessary by the elimination of marginal producers and the redeployment of the workers and capital involved. The more rapid the adjustment and the shorter the period of restraint, the more readily can such a course of action be justified. And if it can be justified as a transitional means of protecting the market for such traditional industries as coal mining and cotton textiles, it merits exploration in other cases of threat to traditional markets.

Indeed, where the threatened industry is in the developing countries, the argument for shielding it temporarily against the too-sudden winds of change becomes that much stronger. For, whereas in the more advanced countries the vulnerable industry is likely to employ a very small fraction of the total labour force and the opportunities for other employment are likely to be quite numerous,<sup>9</sup> in the developing countries the dependence on the traditional industry may well be much greater and the alternative activities much fewer.

The ways open to the more advanced countries to prevent technical and economic changes from having too negative an impact on their trading partners among the developing countries need to be selected in the light of all the circumstances of the particular commodity. They could reasonably be asked to refrain from giving any tax or other advantage to the industry whose rapid expansion was held to be disruptive to the traditional market served by a developing country. There are precedents for assuring the import of a certain share of total consumption in the economy concerned, as in the

<sup>8</sup> For an evaluation of the working of the Arrangement, see the report of the UNCTAD Secretariat, "Study of the origins and operation of international arrangements relating to cotton textiles" (TD/20/Supplement 3). In the present context, the merits and ambiguities of the Arrangement are less important than its existence as a recognition of the need to make orderly adjustments to the forces of change.

<sup>9</sup> It is relevant to note in this connexion that the International Labour Organisation has estimated that the loss of textile industry jobs in the developed market economies attributable to the increase in imports from developing countries in the first half of the 1960's amounted to a mere 0.04 per cent of total manufacturing employment. See "Some labour implications of increased participation of developing countries in trade in manufactures and semi-manufactures; report by the International Labour Office" (TD/46/Rev.1).

<sup>7</sup> See the President's "seven-point programme" announced on 2 May 1961.

case of petroleum imports into the United States. There are also precedents for regulating the product mix—as between the domestic and imported elements—to be absorbed by user industries, as in the case of tobacco in some European countries, as well as the chicory-coffee combination. In principle, it is always likely to be preferable to provide resources to improve the efficiency of the traditional industry rather than devise means for curbing the new industry that threatens it. And in any case, assistance to a developing country to reduce its dependence on the traditional export could be duly reflected in various ways in which its development was promoted. No scheme that prolonged a developing country's dependence on an industry or commodity whose position was likely to become progressively weaker on the international market would be in the interest of longer-run growth.

#### *Trade liberalization: policies and limitations*

The movement of the developed market economies towards more liberal trading policies in the post-war period has been a vigorous and successful one by earlier standards. Under the GATT, several major campaigns have been waged to reduce tariff barriers, beginning in 1947 and culminating in the so-called Kennedy Round that was completed in 1967. This latest round abandoned the detailed negotiation of concessions on individual items between pairs of countries and adopted a more general approach

involving across-the-board cuts in tariffs<sup>10</sup> the full implementation of which is likely to make customs duties a relatively insignificant obstacle to international trade as a whole.

In a general case, this conclusion is probably also valid for trade between the developing countries and the developed market economies. Even before the Kennedy Round, a sizable proportion of this trade—the bulk of raw material is included and fuels excluded—was duty-free. Of the imports (other than fuels) that were subject to duties, about 60 per cent by value gained some reduction from the negotiations (see table 58). And of the concessions on items regarded by the developing countries to be of particular interest to them—tropical beverages, fruit and oil-seeds, spices, rice, sugar and maize, processed vegetable oils, fish and fruit, non-ferrous metals, textiles and clothing and leather goods—reductions of 50 per cent or more were negotiated on trade involving over 40 per cent of the total value.

While customs tariffs may no longer constitute a formidable barrier to trade in general, they continue to handicap the movement of some items to a greater extent than might appear likely from the nominal

<sup>10</sup> The contrast in procedure was not in practice quite as stark as this would imply. The "most-favoured nation" principle tended to generalize, among all GATT members, the concessions negotiated bilaterally in the earlier rounds while, in the case of the Kennedy Round, lists of individual country reservations, though not lengthy, served to reduce the complete generality.

Table 58. Major developed market economies:<sup>a</sup> imports and Kennedy Round tariff concessions  
(Billions of dollars except as indicated)

Category	Value of imports, <sup>b</sup> 1964		Duty-free before Kennedy Round	Amount gaining no tariff reductions	Imports subject to tariff reductions	
	Total	From developing countries			Amount	Percentage of dutiable amount
Fuels	9.30	7.00	—	7.00	—	—
Tropical products <sup>c</sup>	4.20	4.04	2.07	0.99	0.98	50
Raw materials	12.40	4.10	3.76	0.12	0.21	64
Crude food-stuffs	8.70	2.00	(0.29) <sup>d</sup>	(0.47) <sup>d</sup>	(0.38) <sup>d</sup>	..
Processed food <sup>c</sup>	1.81	0.57	0.15	0.19	0.24	57
Non-ferrous metals <sup>c</sup>	2.89	0.90	0.57	0.13	0.21	63
Cotton yarn and fabrics <sup>c</sup>	0.37	0.09	—	0.02	0.07	77
Clothing <sup>c</sup>	0.82	0.18	—	0.03	0.14	81
Other textiles <sup>c</sup>	1.20	0.34	0.04	0.04	0.26	87
Leather goods <sup>c</sup>	0.41	0.07	0.02	0.01	0.04	74
Other manufactures	22.20	0.80	0.24	0.10	0.45	82
Total	64.30	20.10	(7.14) <sup>d</sup>	(9.10) <sup>d</sup>	(2.98) <sup>d</sup>	25
Excluding fuels and crude food-stuffs	46.30	11.10	6.85	1.63	2.60	61

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on data compiled by GATT.

<sup>a</sup> European Economic Community, Japan, Sweden, Switzerland, United Kingdom and United States. These countries account for about 90 per cent of the imports of the developed market economies from the developing countries.

<sup>b</sup> Excluding imports from preferential sources, such as United Kingdom imports from the Commonwealth and European Economic Community imports from the associated countries.

<sup>c</sup> Categories of particular interest to the developing countries; they cover 367 items on the Brussels Tariff Nomenclature.

<sup>d</sup> Incomplete information: temperate farm products—cereals, meat and dairy products—not included.

level of the remaining duties. The effective magnitude of the barrier tends to be much greater for many of the items that the developing countries are capable of producing than for many of the newer and more sophisticated products. For when all manufacturers are in a position to buy their basic raw material on the world market, the impact of a duty on imports is more accurately measured in relation to the value added in manufacture than to the total value of the product. The smallness of the value added in many of the processing industries that are characteristic of the early stages of industrialization tends to make even a nominally low tariff into a serious obstacle to trade.

In the economically advanced countries, the traditional milling, refining and other processing industries tend to belong to the slow-growing category, vulnerable to external competition, particularly where capacity utilization is sub-optimal and profit margins low. The Kennedy Round of negotiations revealed again the reluctance of Governments to reduce the existing level of protection for such industries. In the case of tropical vegetable oils (Brussels Tariff Nomenclature ex 15.07), for example, the tariff cuts were very few, very small and on minor items: on tobacco-seed oil in the European Economic Community and the United States, on castor oil in the United States and from 10 per cent to 8 per cent *ad valorem* on palm oil and palm kernel oil in Japan. In the case of processed food-stuffs of which over half of the items nominated as of special interest to developing countries faced duties in excess of 15 per cent, reductions were made on trade valued at \$0.24 billion in 1964 but there were no concessions on 40 per cent of the dutiable items. Among the non-ferrous metals, almost 30 per cent of the tariff items (concentrated in the lead and zinc section) were left unaffected by cuts, among the cotton textile items, about 20 per cent and among the clothing items, about 10 per cent.

In general, the items on which no concessions were made included those on which duties tend to yield a significant revenue—most notably beverages and tobacco—and those fulfilling an essentially protective function. Thus the fact that no concessions were made in about half of the tariff items in the category of food-stuffs is a reflection of the vulnerability of many of the simpler processing industries—such as milling and roasting and preserving—to external competition. A similar actual or assumed need for protection helps to explain the unwillingness to reduce duties in several other categories of relatively low-value-added industries: more than a fourth of the items grouped as tropical products (such as cocoa, coffee and tea, the palm oils and certain fruit, nuts and spices), fuels, non-ferrous metal products and foot-wear, and about a fifth of items under cotton yarn and fabrics and iron

and steel (see table 59). Indeed the proportion of items that will be subject to a duty of 5 per cent or less when the Kennedy Round cuts are implemented provides a rough measure of the distribution of weak industries.<sup>11</sup> The small proportion (under 10 per cent) of low-tariff items in the textile and foot-wear category is of particular significance to the developing countries, some of which are well-placed to export such labour-intensive products.

One of the items of considerable interest to many developing countries is sugar, classified above as a "tropical product" but clearly subject to duties designed to protect the domestic beet industries of the developed market economies. There has been little effort in recent years to improve the international division of labour by drawing a higher proportion of sugar from low-cost cane sources in the developing countries. Despite the relatively slow growth in demand in high-income countries—*per capita* consumption in the United States, for example, has averaged just over 100 pounds a year in the post-war period, more or less the same as in the 1930's, and similar rates have obtained in other industrial countries notwithstanding quite a wide disparity in price—domestic production in the first half of the 1960's was about one-third above the figure for the first half of the 1950's in North America and about one-half higher in western Europe. No concessions were made on sugar duties in the Kennedy Round: they remain at rates ranging from 1.5-11 per cent in the United Kingdom, up to 80 per cent in the European Economic Community.<sup>12</sup>

Less readily explicable was the failure to achieve greater and more widespread reductions in the duties and taxes on the beverage crops and bananas—products which have no counterpart to be protected in the developed market economies. Though a number of cuts were agreed to, some of the principal importers—notably the European Economic Community—were not prepared to relinquish the tax revenue raised on these commodities. The duty levied by the European Economic Community and the United Kingdom on bananas—20 per cent and 14 per cent, respectively—as well as the fiscal taxes levied on the beverage crops in various countries,

<sup>11</sup> As the items are of widely differing importance from the point of view of actual or potential trade of developing countries, such a ratio provides no more than an indication. As the volume of trade may be greatly affected by the existing duties, actual import data do not provide a markedly better guide. It should be borne in mind that in a number of cases, duties are reinforced by other barriers.

<sup>12</sup> When the common agricultural policy in respect of sugar comes into effect in mid-1968, Congo (Brazzaville) and Madagascar—the only Associated States that are net exporters of sugar—will lose their present preferences and be subject to the variable levy that will protect the Community's beet industry. The European Economic Community Commission has recommended, as an adjustment mechanism, a subsidy to Community refineries using raw sugar from the Associated States as well as a concessionary tariff for canned fruits containing sugar.

Table 59. Major developed market economies: changes in tariffs negotiated in the Kennedy Round

Category	Percentage of tariff items duty-free or subject to a duty of 5 per cent or less		Percentage of dutiable tariff items on which no reductions were made
	Before	After	
<i>Of special interest to developing countries</i>			
Tropical products ..	37	52	41
Processed food-stuffs	17	26	44
Non-ferrous metals and products	27	43	29
Cotton yarn and fabrics	2	5	21
Clothing	—	1	10
Other textiles	4	9	15
Leather goods	8	31	9
<i>Other</i>			
Crude food-stuffs <sup>a</sup>	37	44	54
Beverages and tobacco	6	9	59
Raw materials	70	84	13
Fuels	53	70	36
Chemicals	21	47	3
Chemical products	24	43	4
Pulp and paper	24	48	10
Iron and steel	16	28	19
Iron and steel products	11	25	15
Machinery	6	26	11
Transport equipment	5	31	6
Foot-wear	2	10	28
Wood manufactures	6	24	8
Non-metallic mineral products	20	36	9
Precision instruments	5	10	12
Other manufactures	9	23	7

Source: See table 58.

<sup>a</sup> Other than cereals, meats and dairy products.

particularly European Economic Community members, were all retained.<sup>13</sup> Apart from the duties retained by Japan in the case of tea and by Switzerland in the case of coffee, the principal remaining tariff on the beverage crops is that of the EEC—9.6 per cent on coffee beans, 5.4 per cent on cocoa beans and 9 per cent on bulk tea, all well below the previous rates. Such duties would appear to be less a matter of attachment to the revenue raised on items of low price elasticity once regarded as luxuries than a convenient means of permitting preferential entry to beverage crop exports from the Associated States which have enjoyed duty-free entry since 1964. In the period 1959-1966, the latter have accounted for about a fourth of EEC coffee imports (a slightly declining share) and about a third of cocoa imports (a slightly increasing share).

The preference system that exists between the EEC and the Associated States and a parallel system between the United Kingdom and Commonwealth countries have tended to complicate the question of a generalized arrangement under which all developing countries might be granted preferential access

to the markets of the more advanced countries. This question has been before the international community for most of the present decade and has been under active discussion since the first UNCTAD in 1964. Countries that already enjoy certain advantages in respect of their exports are understandably reluctant to have these weakened through sharing; and the prospects of compensation for loss of privilege or of extension of preferential market to embrace other advanced countries have never seemed bright enough to change their attitude.

The doubts that have clouded the outlook have stemmed in the past from the problem of vulnerable industries referred to above. The more advanced countries have never been prepared to grant unconditional entry of imports: an escape clause, to be invoked in case of what has been termed "market disruption", has always been contemplated as part of any preferential arrangement.<sup>14</sup> To the developing countries, therefore, a preferential arrangement that

<sup>13</sup> A sizable volume of bananas enter the EEC under a duty-free quota accorded earlier to the Federal Republic of Germany.

<sup>14</sup> The most recent general statement on this is contained in "Report of the Special Group of the Organisation for Economic Co-operation and Development on trade with developing countries", submitted to the second UNCTAD (TD/56): "Any scheme of special tariff treatment must inevitably include some safeguard or adjustment arrangements to avoid the risks of dislocation of industry and labour".

was successful—that is, permitted a significant increase in exports—might merely lead to the substitution for customs duties of quantitative controls under a régime modelled on the Long-Term Cotton Textile Arrangement referred to in the previous section. This has resulted in a much slower growth in textile export earnings than at one stage seemed likely.

Much of the discussion of a possible preferential system has been premised on a simple two-party structure: “developed countries” would accept imports of specified goods at below regular customs duties from “developing countries”. As indicated in chapter I, however, the latter cover an extensive spectrum and, given the fact that a preferential reduction in duties would relate very largely to manufactured goods of one kind or another, the capacity to benefit from such an arrangement would tend to be concentrated in a few countries rather than spread uniformly among the group. Like the developing countries already enjoying preferential access to certain markets, the less industrialized members of the group have tended to doubt the advantages of a generalized scheme. However, these are the countries that would seem to be thought of by the developed market economies as most eligible for preferential access. Indeed, the scheme implicit in the principles suggested by the Organisation for Economic Co-operation and Development (OECD) might in some respects be regarded as a form of infant-industry assistance: products in respect of which developing countries are already competitive would be excluded from the outset.<sup>15</sup>

Country differences have also manifested themselves in the “developed” group within which concern has been expressed about the need for “burden sharing”. The less concentrated the flow of imports on particular destinations, the less is the likelihood of market disruption. When a tariff cut is conceded on one product in return for concessions by the partner country, the justification is the national interest and the stimulus to economic growth that the country may reasonably expect from the resultant increase in trade. The granting of a tariff cut to a developing country on a non-reciprocity basis is less easy to make acceptable to the industry involved: it can be defended only as part of a concerted effort to assist the development process in which other industries and other industrial countries are equally engaged and from which in the long run all may expect to gain.

Access to the markets of higher-income countries can thus serve two quite different purposes. It has customarily been thought of in rather general terms as a means of accelerating the rate of increase in the foreign exchange earnings of developing countries, individually or as a group. To this end, what

is required of the more advanced countries is the most far-reaching liberalization of trade, that is, the greatest possible lowering of barriers over the broadest possible front. Correspondingly, the developing countries’ response would be a general campaign to expand sales of as many commodities as possible, bearing in mind that the slower-growing the demand for any one product, the more rapidly its exports would encroach on the market served by the domestic industry in the importing country and the more difficult it would probably be for the latter to keep its trade barriers down. This sort of liberalization would benefit most particularly the vigorous, competitive industries in the developing countries; it would help to improve the international division of labour, but in many cases at the expense of traditional labour-intensive industries in the more advanced countries.

Liberalization which is premised on minimal disturbance of existing markets and patterns of domestic production would necessarily have to be a much more selective process. Its main purpose would be to support particular development efforts rather than to seek a more rapid increase in the over-all export earnings of the developing countries. More specifically, it would aim at assisting developing countries to overcome one of the principal obstacles to their industrialization, namely, the narrowness of their domestic markets. Grant of entry into the larger market would be designed to permit the setting up in the developing country of productive facilities that could not be justified by the existing domestic market. This would provide an escape from the import-substitution pattern of industrial diversification that considerations of local market demand and production-scale technology tend to impose on so many developing countries.

In many cases, it is likely to be easier to establish an industry that is in part export oriented on the basis of a market access arrangement with a more advanced country than on the basis of an economic integration or co-operative arrangement with a neighbouring country. The new industry would help in the productivity-raising process that is the essence of economic development and which, by speeding up the growth of local incomes, might in due course diminish its own export dependence.

To some extent, this purpose has been served by some of the recent aid and trade procedures of the Soviet Union: in so far as the credit advanced for the setting up of a particular plant is serviced and repaid by means of the output of the plant, market access is in effect being provided in support of a new industry. On a much larger scale, private direct investment in the developing countries has been instrumental in stimulating both development and foreign exchange earning by its tendency to concentrate on export industries whose output is often

<sup>15</sup> *Ibid*, p 5, para c.

marketed in the country from which the capital originated. The great bulk of such investment has been in primary products, particularly minerals, with a well-established world market. In some instances, however, manufactured products have been involved and the ability to market them abroad has been significantly increased by the connexion between the factory in the developing country and the parent enterprise in a more advanced country.

This suggests that in the case of manufactures, formal liberalization may often be insufficient to stimulate a flow of trade from the developing countries to the more advanced countries. Apart from obstacles that may exist to the creation or expansion of industrial facilities in many of the developing countries (as described in chapter II), all sorts of difficulties may arise at the marketing end. Depending on the end use of the product, there are problems of quality control, packaging and labelling, physical distribution and financing, which in various combinations may constitute a barrier to entry no less formidable than a customs tariff.

#### *Price stabilization and other short-term problems*

One of the problems of trade relations to be given much thought and discussion during the post-war period is that of short-term instability. This has been approached from two directions—by way of individual commodities and the stabilization of prices and trade flows, and by way of compensatory arrangements for offsetting or mitigating the effects of short-term fluctuations in export earnings. In both cases, diagnosis and debate have gone much further than action. And instability of export earnings has continued in varying degree to complicate the tasks of foreign exchange management and even of fiscal budgeting in many of the developing countries.

Recent experience with international commodity agreements has demonstrated the critical importance of certain aspects of organization and operation.<sup>10</sup> These include the comprehensiveness of coverage, the degree of realism in the price range that is to be defended, the capacity to finance and handle stocks, and the willingness of participants to make periodic adjustments in rights and obligations in order to keep them in line with external developments. Merely to list such requirements is to go a long way in explaining the failure of such arrangements to make more of a contribution to the trading problems of the developing countries than in fact they have.

The need for comprehensiveness places a special responsibility on the more advanced countries. As

importers of the bulk of any commodity moving in international trade, they are in a position to police the trade flow more effectively than can the producing countries. This has been illustrated recently in the case of the International Coffee Agreement which has price ranges geared to quality and country quotas determined on a quarterly basis. The operation of the Agreement leans heavily on the accuracy of information on origin and type furnished by the importing country participants.

Regulation of the flow of the commodity on to the market is likely to become progressively less effective the greater the proportion of the supply coming from producers outside the Agreement. The more dispersed the pattern of production, the more difficult it tends to be to organize a comprehensive stabilization arrangement. This has been a potent factor keeping down the number of attempts at international supply control. To be effective, coverage needs to extend not only to all the producers of the commodity in question but also to producers of close substitutes, changes in the supply of which are likely to affect the market. This has inhibited recent attempts to deal with butter and natural rubber, two commodities that have experienced marked instability at various times during the post-war period.

Selection of a defensible price range is a perennial problem in market stabilization arrangements. It was unusually troublesome during the period under review because of the various distorted price relationships left over from the war-time markets. Some commodities—the beverage crops, for example—started at historically high prices which fell rapidly when the fruits of investment in the second half of the 1940's began to appear. Others—wheat and sugar, for example—were the object of domestic support programmes which tended to leave the world market residual in nature and much smaller and less stable than it would otherwise have been.

The first post-war International Wheat Agreement (1949/50-1952/53) set a price range that proved to be consistently below the actual market and thus tended to favour importers who were entitled to buy their wheat at the upper limit of the range. The second Agreement (1953/54-1955/56) raised the price but at the expense of losing the membership of the United Kingdom, the largest importer. In the ensuing years, production remained in excess of consumption and the main determinant of price was not the Agreement but the stockpiling policy of the major exporters, particularly the United States.

In the case of tin, the price range was adjusted with each renewal of the Agreement, but it would appear to have been influenced more by preceding than by prospective market conditions: in the slow

<sup>10</sup> For a more detailed analysis of the problems of stabilizing international commodity markets, see *World Economic Survey, 1963, Part I: Trade and Development: Trends, Needs and Policies* (United Nations publication, Sales No.: 64.II.C.1), chapter VI.

growth period in the second half of the 1950's it was above the market; in the 1960's it fell behind the market, and in both periods extraordinary measures were necessary to sustain it—borrowing of cash and special restraints on exports in 1958, supplies from the United States strategic stockpile in the 1960's.

Difficulties in coming to terms on a price range have been one of the principal reasons why producer countries and importers have not been able to hammer out a stabilization arrangement for cocoa. The success of such an arrangement—as, indeed, of all stabilization schemes—would depend on supply management and this in turn requires purposeful operation of stocks. This is usually a matter of some difficulty for developing countries, partly because of the physical problems of handling and storage, partly because of the financial problem of retaining stocks of an adequate size for the intended purpose and partly because of the need to back a stock operation with longer-run control over production. The only internationally operated stock in the post-war period has been that of tin—high-value material capable of being kept for use on the organized London market—and, as indicated above, that stock proved too small to act as a sufficient buffer in the prevailing circumstances.<sup>17</sup>

The stocks that seem to have played the most significant stabilizing role in recent years have been held nationally. The operation of the International Wheat Agreement was always contingent on the capacity and willingness of the leading exporters, particularly the United States, to hold the requisite stocks. United States stocks also served to stabilize the world cotton market through most of this period, though in this case there was no international arrangement other than of a study group type. Similarly, the willingness of the largest exporter of coffee, Brazil, to hold off the market a sizable inventory—exceeding a year's total consumption at one stage—has been an essential condition for the operation of the International Coffee Agreement.

The size of these stocks suggests why the developing countries are likely to find the matter of financing them a serious obstacle to the use of buffers for price stabilization purposes. At the same time, their growth suggests why importing countries have been reluctant to share the burden of financing. The accumulation of a stockpile can easily become an open-ended commitment unless it is accompanied by appropriate production policies. So that, although importers in the more advanced countries would doubtless prefer a stable primary commodity price to a

<sup>17</sup> This was also true of the attempts of major mining companies to hold the price of copper at what they regarded as a tenable long-run price (relative to that of aluminium) in the face of the demand situation in the 1960's

fluctuating one,<sup>18</sup> the onus of paying for the most promising stabilizing device has been left on the developing countries.

The adjustment of production is the point at which short-term stabilization measures merge with longer-term policy. In many ways it poses the most difficult hurdle that, if it is to be successful, a stabilization arrangement must overcome. For it is at this point that the competitive relationship of producers predominates over the co-operative, where the less favoured or less efficient producers have to give way before the more favoured or more efficient. The International Tin Agreement attempts to meet the problem by a periodic reallocation of unfilled export quotas. The International Coffee Agreement also has a quota adjustment provision, including an over-all increase in the case of a particular type of coffee if its price should persist above the stabilization range (and under which African producers of *robustas* have increased appreciably their share of the total market).

Short-term fluctuations in the prices of particular commodities contribute significantly to the instability of total export receipts in many of the developing countries. Because of the strategic role played by exports in most developing countries—not only in the process of capital formation but also in terms of the incomes of factors engaged in export activities and of the revenue derived by government from these activities—the problem of stabilizing export earnings has been a matter of considerable concern throughout the post-war period. Though in statistical terms the degree of export instability was much lower than in earlier years,<sup>19</sup> its significance was greatly magnified by the new importance attaching to economic growth and the critical role played by exports in the development process.

The idea of creating some compensatory mechanism that would even out the disturbances caused by price changes began to be discussed in the early 1950's. One of the early proposals was the transfer of funds from countries whose terms of trade had improved to countries whose terms of trade had deteriorated.<sup>20</sup> In *World Economic Survey, 1958*,<sup>21</sup> the possibility of insuring against the risk of a sharp decline in export receipts was raised, and for several years schemes for offsetting the effects of such declines by means of compensatory payments from

<sup>18</sup> There is some evidence that, because of the tendency of buyers to step up their intake on a rising market and to hold back on a declining market, the average cost of a commodity to importers is increased by instability.

<sup>19</sup> The average annual fluctuation of export proceeds of twenty-five primary products important in world trade in the first half of the twentieth century was of the order of 23 per cent. The average annual fluctuation of export earnings of primary exporting countries in the post-war period has been less than half of this figure.

<sup>20</sup> See *Instability in Export Markets of Under-Developed Countries* (United Nations publication, Sales No.: 52.II.A.1).

<sup>21</sup> United Nations publication, Sales No.: 59.II.C.1.

a central fund were extensively debated.<sup>22</sup> Among the ideas put forward was that of a development insurance fund fed by premiums levied on total export earnings—at rates scaled to take account of ability to pay—and available for making good varying proportions of short-falls below the trend in export earnings of participating countries.

A good deal of experimentation was carried out with historical data to show the feasibility and cost of various schemes of this nature. Most of the discussion was about the arithmetic, and an inter-governmental group that looked closely at various possibilities actually listed some of them for more intense official study.<sup>23</sup> Reluctance to proceed further with them seemed to stem less from doubts about the arithmetic of any of the schemes than from a more basic fear of any formula which reduced the problem to mechanical or actuarial proportions. One of the most frequent objections to find expression was to what was termed "automaticity".

In the meantime, the International Monetary Fund (IMF) had taken action that went some way towards mitigating the difficulties experienced by developing countries from sudden reductions in their export receipts. International Monetary Fund quotas, which determine rights to credit facilities, were increased generally in February 1966 and under a new formula for quota entitlement, giving greater weight to trade and variability of trade and less to national income and foreign exchange reserves, some of the primary-exporting countries were granted increases of rather more than average proportions. At the same time, an additional borrowing tranche was created—over and above the four normal tranches—especially for use by countries whose balance of payments had been upset by events outside their control.

This move away from the general towards the particular has coloured subsequent debate on the subject. The emphasis has been on specific instances of damage to a developing country from an unexpected deterioration of the external environment. In the case of the IMF mechanism, the damage inducing a special response is that to the country's balance of payments. One of the recommendations of the first UNCTAD in 1964—A IV.18—directed attention to damage that a sudden decline in export receipts might inflict on a country's development plan.<sup>24</sup> The International Bank for Reconstruction

and Development (IBRD) was charged with examining the problem of providing so-called "supplementary finance" to countries whose external resources were falling short of what could reasonably have been expected and what had therefore been taken into the reckoning of development plans. The staff of the Bank in due course put forward a scheme that was considered workable, but even at this reduced level, with judgement and control being exercised at each point, no general agreement has yet been reached.<sup>25</sup>

With the more vigorous growth in production in the economically advanced countries, and a consequent improvement in the export results of the developing countries as a group, the period 1961-1966 saw some of the urgency that had characterized it in the 1950's disappear from the problem of short-term instability. The only mechanism dealing specifically with the results of such instability is that of the IMF. That the problem itself has not disappeared is implicit in the actual operations of the Fund. In respect of both the number of developing country borrowers and the volume of credit advanced, recent years have seen record levels of activity (see table 60).

#### ECONOMIC RELATIONS OF THE CENTRALLY PLANNED ECONOMIES WITH THE DEVELOPING COUNTRIES

The flow of goods and services between the developing countries and the centrally planned economies has been influenced very largely by the relatively rapid rate of growth of the latter and by the special forms of official co-operation involving the provision of credit and technical assistance. In line with these trade and aid agreements, most of the flows have been organized on a bilateral basis, but some multilateralization has been taking place in the most recent phase.

Between 1955 and 1965, the centrally planned economies increased their material products by rates varying from about 4 per cent a year in the case of Czechoslovakia to around 8 per cent in the case of Bulgaria, Romania and the Soviet Union (see table 61).

This growth permitted the absorption of increasing quantities of goods from developing countries and, as indicated in table 56 above, the rate of increase in exports from the developing countries to the centrally planned economies was about three times as high as that of total developing-country exports.

<sup>22</sup> See, particularly, *International Compensation for Fluctuations in Commodity Trade* (United Nations publication, Sales No.: 61 II.D.3) and "Stabilization of export proceeds through a development insurance fund" (E/CN.13/43, 18 January 1962).

<sup>23</sup> See "Report of the Technical Working Group on Compensatory Financing for Export Shortfalls" (E/CN.13/56, 16 January 1963).

<sup>24</sup> *Proceedings of the United Nations Conference on Trade and Development*, vol. I: *Final Act and Report* (United Nations publication, Sales No.: 64 II.B.11).

<sup>25</sup> The original IBRD staff report, *Supplementary Financial Measures* (Washington, D.C.), has been under active consideration since its publication in December 1965. The second report of an intergovernmental group set up by UNCTAD to study the question sets out the major issues that have been identified as requiring decisions before a scheme of this nature could be launched (see document TD/B/C.3/44).

Table 60. International Monetary Fund: accommodation of developing countries, 1956-1967

(Annual averages; millions of dollars, except as indicated)

Item	1956-1958	1959-1961	1962-1964	1965-1967
Number of stand-by arrangements <sup>a</sup>	8	13	15	21
Amount of drawings <sup>b</sup>	183	359	243	484
Amount of repayments	43	189	199	335
Net accommodation	141	170	44	150
Use of special compensatory tranches <sup>c</sup>			25	67

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on International Monetary Fund, *International Financial Statistics* (Washington, D.C.), various issues.

<sup>a</sup> Stand-by arrangements in effect at end of year.

<sup>b</sup> Including use of special compensatory tranche.

<sup>c</sup> Became effective in 1963.

Table 61. Centrally planned economies: growth in real net material product and components,<sup>a</sup> 1955-1965

(Average annual percentage rate)

Country and item	1955-1960 <sup>b</sup>	1960-1965 <sup>c</sup>	1955-1965 <sup>d</sup>
<i>Albania</i>			
Material product	7.0	7.3	7.1
Agriculture and forestry	-0.6	9.8	3.9
Manufacturing	18.9	8.2	14.0
<i>Bulgaria</i>			
Material product	9.7	6.7	8.2
<i>Czechoslovakia</i>			
Material product	6.8	2.0	4.1
Agriculture and forestry	-3.6	-5.2	-4.5
Manufacturing	8.8	4.0	6.1
<i>Eastern Germany</i>			
Material product	7.1	3.3	5.2
<i>Hungary<sup>e</sup></i>			
Material product	6.6	4.4	5.5
Agriculture and forestry	-1.2	-1.5	-1.4
Manufacturing	7.8	7.6	7.7
<i>Poland<sup>e</sup></i>			
Material product	6.8	6.4	6.6
Agriculture and forestry	4.7	1.9	3.3
Manufacturing	8.1	8.6	8.5
<i>Romania</i>			
Material product	6.9	8.9	7.9
Agriculture and forestry	-0.2	0.4	0.1
Manufacturing	11.3	13.5	12.4
<i>USSR</i>			
Material product	9.1	6.5	7.8

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on *Yearbook of National Accounts Statistics, 1966* (United Nations publication, Sales No.: 67.XVII.14) and Eastern Germany, *Statistical Yearbook, 1967* (Berlin).

<sup>a</sup> Excluding economic activities not contributing directly to material production, such as public administration and defence, personnel and professional services. Manufacturing includes mining and quarrying.

<sup>b</sup> 1955-1959 in the case of Czechoslovakia.

<sup>c</sup> 1960-1964 in the case of Albania.

<sup>d</sup> 1955-1964 in the case of Albania; weighted average rate based on two subperiods in the case of Czechoslovakia.

<sup>e</sup> Because of minor differences in coverage from 1960 onwards, figures for 1955-1960 are not strictly comparable to those for later years. However, the influence of this factor on growth rates is negligible.

The proportion of total developing-country exports going to the centrally planned economies thus rose from less than 3 per cent to over 6 per cent.<sup>26</sup>

The trade agreements on which this upswing in exports was based reflected the division of labour that seemed appropriate in the prevailing circumstances. With the centrally planned economies laying special stress on the domestic development of heavy engineering-based industry, their exports to the developing countries consisted to a considerable extent—40 per cent in 1966—of machinery and equipment, while their imports were mostly primary products, notably sugar, fibres and rubber. In the first half of the 1960's the value of exports of primary products (SITC 0, 1, 2 and 4) to the centrally planned economies increased by over 13 per cent a year, accounting in the aggregate for about a third of the increment in such exports. Being founded on official agreements, centrally planned economies' trade with the developing countries has remained highly concentrated: in 1965, fifteen countries<sup>27</sup> accounted for a fifth of all developing-country exports but for almost 85 per cent of developing-country exports to the centrally planned economies, while almost 70 per cent of developing-country exports to the centrally planned economies came from five countries (Argentina, Cuba, India, Pakistan, United Arab Republic).

Of increasing influence on the pattern of trade—in respect of both country and commodity—has been the provision of credits by the centrally planned economies. Commitments of such credits made in the twelve years ending in 1966 amounted to the equivalent of about \$7 billion (not counting some \$0.8 billion committed by mainland China). The great bulk of this amount had been pledged from

<sup>26</sup> These figures refer to the trade of Latin America (including Cuba), Africa and Asia (other than mainland China, Japan, North Korea, North Viet-Nam and Turkey) with Albania, Bulgaria, Czechoslovakia, Eastern Germany, Hungary, Poland, Romania and Soviet Union.

<sup>27</sup> Afghanistan, Argentina, Burma, Cambodia, Ceylon, Cuba, Ghana, India, Mali, Morocco, Pakistan, Sudan, Syria, Uganda, United Arab Republic.

funds earmarked for the purpose in the national budgets of the lending countries under bilateral economic and technical co-operation agreements. Most of the credits carried an interest charge of 2.5 to 3 per cent a year and a maturity of twelve to fifteen years, repayment to begin within one to three years of the completion of delivery of the goods concerned or of the commissioning of the plant.

Just as such credits are directly related to the nature of the goods moving from the centrally planned economies to the recipient developing countries, so the subsequent servicing of the debt has strongly influenced the flow of goods from the developing country to the lending country. For, in general, provision has been made for such servicing to be carried out by means either of the traditional exports of the developing country concerned or of local currency for which such goods can be purchased. Some of the contracts, however, have stipulated that interest and amortization should be effected through delivery of the product of the

facility that the credit itself had been instrumental in creating. This has opened up the possibility of a significant diversification of the borrowing country's exports.

Most of the transactions covered by such credits have involved investment in the public sector in the developing countries, and many have included not only the delivery of specified goods but also the provision of associated technical assistance, initially in survey and design and subsequently in the erection and running in of the plant. Among the important technical assistance activities in many cases has been the training of local personnel to operate the new equipment.

The bulk of the credit pledged by the centrally planned economies has come from the Soviet Union—about two-thirds of the total up to the end of 1966 (including the commitments of mainland China). More than three-fourths of this Soviet credit was committed in respect of industrial investment and about half of it for heavy industry (see table 62).

Table 62. USSR: credit provided to developing countries, according to industrial destination, cumulated to end-1966

Sector	Percentage of credit to developing countries in			
	Asia		Africa	
	Committed	Completed	Committed	Completed
Industry	71	61	73	70
Transport and communications	11	17	2	3
Agriculture	4	4	12	9
Geological prospecting	10	12	6	8
Dwellings and municipal services	—	—	1	1
Education and culture	3	5	6	8

Source: Centre for Development, Planning, Projections and Policies of the United Nations Secretariat, based on *International Affairs*, No. 10 (Moscow), p. 101.

Among the most important components of the latter are iron and steel enterprises in Algeria (where a plant at Annaba is expected to meet all domestic requirements for certain types of rolled steel), in India (where the Bhilai plant furnished about a fourth of the country's pig iron output in 1967) and in Iran (where a planned 500,000-600,000-ton steel plant will be the country's first integrated mill). Altogether, Soviet credits are expected to result in new steel-producing capacity of over 6 million tons a year, of which about a third was in place by the end of 1966 (see table 63). Electric power development is being assisted in a number of countries—including Afghanistan, Burma, Cambodia, Congo (Brazzaville), Guinea, Iran, Iraq, Nepal, Syria and Tunisia—but by far the largest project is the Aswan hydroelectric complex in the United Arab Republic which will not only generate power but also permit a one-third expansion in cultivable land through irrigation. As at the beginning of 1967, some 400

projects (mostly industrial) were scheduled for completion in developing countries by the Soviet Union before the end of the decade.

Next to the Soviet Union, the main source of developing-country aid among the centrally planned economies has been Czechoslovakia which up to the end of 1966 had accounted for about a tenth of all the credit committed. One of the most important of the twenty-one bilateral agreements then in effect was one for the erection of a machine tool, foundry and forging establishment at Ranchi in India: this involved an unusually large amount of technical assistance including several hundred Czechoslovak specialists working in India as well as Indian technicians being trained in engineering works in Czechoslovakia.

As indicated above, centrally planned economy aid had been focused on a small number of countries. Though credit commitments have been entered into

Table 63. Capacity of plants built in developing countries with Soviet economic assistance, up to end-1966

Product	Unit	Capacity of plants in			
		Asia		Africa	
		Committed	Completed	Committed	Completed
Electric power	Millions of kilowatts <i>per annum</i>	3.0	0.7	2.6	0.1
Iron ore	Millions of tons <i>per annum</i>	4.6	2.8	0.3	0.3
Cast iron	Millions of tons <i>per annum</i>	5.6	2.4	—	—
Steel	Millions of tons <i>per annum</i>	5.3	2.2	1.2	—
Rolled steel	Millions of tons <i>per annum</i>	3.4	2.0	0.5	—
Engineering equipment	Millions of tons <i>per annum</i>	0.2	0.1	—	—
Refined petroleum	Millions of tons <i>per annum</i>	6.0	4.0	2.5	2.0
Refined sugar	Thousands of tons <i>per annum</i>	14.5	14.5	30.0	—
Canned products	Millions of standard cans <i>per annum</i>	8.0	3.0	59.5	8.0
Window glass	Millions of square metres <i>per annum</i>	9.3	7.5	—	—

Source: As for table 62

with thirty-five countries, up to the end of 1966 two-thirds of the total amount had been pledged to only six—India (22 per cent), United Arab Republic (18 per cent), Indonesia (10 per cent), Syria (6 per cent) and Afghanistan and Iran (5 per cent each). In these countries, centrally planned economy assistance has played a major role in supporting economic development. The centrally planned economies contributed over \$1 billion to the financing of India's third plan (1961/2-1965/6), for example, thus providing a sizable supplement to the \$5.5 billion pledged by the consortium of developed market economies. In the case of Afghanistan, Soviet assistance accounted for almost a third of the investment made under the first plan (1956-1961) and about a half of that of the second plan (1962-1967).

Because of the nature and purpose of the credit arrangements, they have frequently been linked with technical assistance—that is, the provision of professional advice or the training of local technicians by centrally planned economy nationals working in the developing country or the training of developing-country workers in schools or factories in the centrally planned economies—geared to the appropriate manning of the new production facility. A good deal of technical assistance has been organized independently, however, in terms of technical co-operation agreements of which, by the end of 1966, the Soviet Union had concluded thirty-four, Czechoslovakia twenty-four, Hungary twelve and Bulgaria eight. Under such agreements, some 40,000 students from developing countries pursued professional studies in the centrally planned economies in the ten years ending in 1966. The number obtaining technical training in this way was appreciably larger, while centrally planned economy personnel assisting in developing countries accounted for an annual average of 10-12,000 man-years of service. In addition, the centrally planned economies were instrumental in

establishing various educational and training institutions in developing countries.

Starting on an *ad hoc* basis in the second half of the 1950's, this technical assistance effort has gradually become more systematized. Special institutions have been established in some countries (notably, in Czechoslovakia and the Soviet Union) and special courses organized in others (Eastern Germany and Hungary) in order to cater more effectively to the specific needs of students and workers from developing countries. Progressively greater efforts have been made to provide the requisite education and training in the developing country itself. An attempt has also been made to strengthen the capacity of developing countries to undertake feasibility studies and other pre-investment activity and to carry out the consulting engineering work necessary in project preparation.

More flexibility also appears to have been sought in the matter of financing. In addition to the state credit referred to above, increasing use has been made of so-called commercial export credits administered by the various state foreign trade organizations specializing in particular categories of goods. These tend to be on harder terms than the state credits (at 4.6 per cent *per annum*, interest rates are about twice as high) and for shorter periods (1-5 years for medium-term, 5-8 years for long-term, with an occasional maximum of ten years). And they usually involve no grace period: buyers are required to make a down payment—usually about 10 per cent—at the signing of the contract, and a similar payment on delivery of the goods. Like the state credits, however, these commercial credits have been eligible for servicing and repayment in the borrower's currency (used to buy local commodities) or even in the product of the facility the credit has helped to bring into being.

The largest of these commercial credits is one covering \$100 million of capital goods to be delivered by the Soviet Union to Brazil over the period 1966-1969. But many such transactions have been arranged in the past few years not only by the Soviet Union but also by the eastern European countries.

When repayment is in kind, the negotiation of credit-based arrangements depends to a degree on the possibilities of the lending country beneficially using the return flow of commodities. Recent moves have been in the direction of integrating the transactions more closely with the domestic planning process, not only in respect of the goods provided but also in respect of the flow of goods received in exchange. In some cases, this has involved a more purposeful international division of labour.

Thus a recent agreement between the Soviet Union and Chile provides for Soviet credit for machinery and technical assistance to facilitate the production in Chile of goods (copper, for example) required in the Soviet Union.<sup>28</sup> Essentially similar agreements have been entered into with Algeria to build a plant to process wine into cognac, to modernize certain iron ore mines and to erect the Annaba iron and steel plant referred to earlier in this section;<sup>29</sup> in each case the product would be shipped to the Soviet Union as repayment of the costs incurred. In the same way, India has accepted help in the expansion of various consumer goods industries—shoes, clothing, fruit juices and electric light bulbs, for example—to be repaid by the delivery of part of the output to meet the needs of Soviet consumers for these products.

A more general arrangement has been made with Morocco, based on a jointly owned export-import enterprise which will handle and service investment goods from the Soviet Union and promote Moroccan exports not only in the Soviet Union but also in third markets. Among other joint enterprises exemplifying the increased flexibility are an engineering assembly shop established by Czechoslovakia in Burma and a pharmaceutical factory established by Hungary in Nigeria. Like the Moroccan enterprise, the latter involves private firms as well as the Governments.

The effect of these factory-oriented agreements is beginning to show up in the composition of imports into the centrally planned economies. The proportion of manufactured and semi-manufactured goods imported into the centrally planned economies from developing countries, less than 4 per cent in the mid-1950's, had risen above the one-eighth level by 1966. And although textile yarns and fabrics still

constituted the bulk of this trade, a range of other manufactures had begun to appear—tools, batteries, motor-car parts, railway wagons, refrigerators, cosmetics. This diversification would seem to be essential if a high rate of growth in imports from the developing countries is to be maintained without the centrally planned economies having to engage in the re-export of the traditional items of trade to third markets. Avoidance of such re-export and an increase in the degree of multilateralization of trade and payments arrangements with the centrally planned economies were among the ten points urged by the developing countries at the second UNCTAD with a view to raising the development potential of trade with socialist countries.<sup>30</sup>

#### AID PRACTICES AND POLICIES

The efforts to raise levels of living and accelerate the rate of economic growth in low-income countries initiated in the second half of the 1940's very soon revealed how many, varied and large were the deficiencies in the domestic resources available for the purpose. As indicated above, the making good of these deficiencies by raising the productivity of those factors that are available is the essence of the development process. As many of the requirements have to be obtained from abroad, the process involves appropriate action to increase export earnings to provide the means of financing the necessary imports. For the internal reasons discussed in chapter III and the external constraints referred to earlier in the present chapter, most developing countries have found it extremely difficult to step up their import capacity to the degree required to augment the flow of resources for economic development. An essential concomitant of the intensification of the domestic development efforts, therefore, has been a parallel effort to increase the volume of external resources at the disposal of developing countries.

Ever since the world community committed itself explicitly, in the United Nations Charter, to the task of raising living levels, the more advanced countries have carried a special responsibility for assisting the less advanced in their development efforts. This assistance has taken many forms in the post-war period and, because these forms have often been determined by circumstances in the country of origin rather than by needs in the country of destination, in any assessment of its contribution to the development process, its nature and quality are at least as significant as its quantity.

The major categories of resource transfer are set out in table 64. This indicates the growing importance of official aid in recent years and, among the

<sup>28</sup> For further details, see *Külkereskedelem*, No. 12 (Budapest, 1967).

<sup>29</sup> It is worth noting in the present context that the blast furnaces for this plant have been obtained in France.

<sup>30</sup> See the report of the Second Committee of the Ministerial Meeting of the Group of 77, held in Algiers in October 1967 (TD/38/Add 1, p. 19).

Table 64. Structure of resource transfers from industrial market economies to less developed countries and multilateral agencies,<sup>a</sup> 1956-1966

(Percentage, except as indicated)

Item	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966 <sup>b</sup>
Total transfers (billions of dollars)	6.1	7.5	7.1	7.0	7.9	9.2	8.5	8.6	9.1	10.4	9.8
<i>Composition</i>											
Private	48	50	40	39	39	35	30	29	35	40	35
Direct investment	36	33	26	23	22	20	17	19	20	24	20
Bilateral lending	4	8	5	8	8	7	3	3	4	6	4
Lending to multilateral agencies	—	3	6	3	3	1	3	—	2	2	—
Guaranteed export credits	6	6	2	5	6	7	7	7	9	7	11
Official	52	50	60	61	61	65	70	71	65	60	65
Reparations	2	2	2	2	2	2	2	2	1	1	1
Food	12	13	11	13	14	13	15	15	14	10	9
Technical as- sistance	29	25	32	31	31	30	9	10	10	10	12
Other grants											
Bilateral loans	7	6	11	13	8	14	16	20	18	19	22
Contributions to multilateral agencies	2	4	3	3	7	8	6	4	4	5	5

Source: Centre for Development Planning, Projections and Policies of the United Nations Secretariat, based on Organisation for Economic Co-operation and Development, *The Flow of Financial Resources to Less Developed Countries, 1956-1963 and 1961-1965* (Paris); *Development Assistance Efforts and Policies, 1966 Review, Report of the Chairman of the Development Assistance Committee, and 1967 Review* (Paris); *Geographical Distribution of Financial Flows to Less Developed Countries (Disbursements), 1960-1964 and 1965* (Paris); International Monetary Fund, *Balance of Payments Yearbook* (Washington, D.C.), and special questionnaire issued jointly by the United Nations Secretariat and the International Monetary Fund.

<sup>a</sup> Industrial market economies comprise Australia, Austria, Belgium, Canada, Denmark, Federal Republic of Germany, France, Italy, Japan, Netherlands, Norway, Portugal, Sweden, Switzerland, United Kingdom and United States; Less developed countries comprise Latin America and the Caribbean (other than Puerto Rico), Africa (other than South Africa), Asia (other than mainland China, Japan, North Korea and North Viet-Nam), Cyprus, Gibraltar, Greece, Malta, Spain, Turkey, Yugoslavia and islands in the Pacific;

Multilateral agencies comprise AsDB, EDF, EIB, IBRD, IDA, IDB, IFC, OAS, UNDP, UNFC, UNHCR, UNICEF, UNKRA, UNRWA, UNTEA and WFP.

<sup>b</sup> Preliminary.

official flows, of government lending. Within each of these major categories are diverse forms of transfer, each furnishing resources to the developing countries in a different manner and on different terms. While it is necessary in the present context to deal with aggregations, it should be kept in mind that these may conceal differences which may have a profound effect on the developmental impact of particular transfers.

The traditional methods of transferring resources for development are direct investment and lending. Both have been in general use and by earlier standards have resulted in a considerable flow of capital from the developed market economies to the developing countries. Neither in volume, however, nor in direction has this private flow been sufficient to meet the new needs generated by development efforts.

Direct investment—which averaged about \$2 billion a year net over the period 1956-1966—was highly concentrated on the exploitation of mineral deposits, particularly petroleum. In some cases, fiscal incentives were offered to direct investors and, in

order to offset the special risks attaching to foreign investment in some developing countries, schemes of insurance were devised to guarantee investors against such contingencies as expropriation and inability to repatriate earnings. But outside the mineral field, results were unequal and often disappointing: the small size of the local market, the inadequacies of infrastructure and in the supply of local inputs, and economic and political instability, conspired in varying degree to darken the profitability outlook in many developing countries, especially in contrast to the burgeoning opportunities in many of the higher-income countries.

To state the difficulties that have held down the potential flow of direct investment is not to underestimate its actual contribution to the development process. It has often played a major role in the transfer of technology, in the provision of opportunities for diversifying local employment and raising levels of skill and, as indicated above, in facilitating the export of manufactured products. Indeed, the period under consideration has seen a significant transforma-

tion in attitudes and relationships among developing countries and international companies: there are a number of signs that Governments have begun to show a greater interest in and appreciation of the development potential of foreign enterprise, while the latter have become much more aware of their responsibilities in the development process and more willing to identify their interests with the economic performance of the host country.<sup>31</sup>

Private lending to the developing countries has not been a very fruitful source of capital in recent years: between 1956 and 1966, the annual average amount passing in this way was little more than \$0.4 billion net. As in the case of direct investment, there was a good deal of concentration: the borrowers consisted very largely of countries with traditional access to particular capital markets or to particular lending institutions and those—often the same—with sufficiently high credit ratings. Even radical institutional improvements that succeeded in making official borrowing much easier and less costly would not be of much help to countries whose external debt-servicing burden was already heavy in relation to prospective foreign exchange earning capacity.

The high interest rates payable on capital drawn from the open market—especially in the most recent period—have given rise to proposals for subsidizing the borrowing of developing countries by means of official subventions from the more advanced countries. If all developing countries were to be eligible, the borrowing would have to be carried out by a multilateral institution with appropriate guarantees. Such institutions—notably the IBRD and the Inter-American Development Bank (IDB)—have raised funds on various national capital markets for many years: between 1956 and 1966, they collected an average of almost \$0.2 billion a year net. Though in relending to developing countries they have continued to operate on strict banking principles, they have made funds available to countries that did not have ready access to the capital market and at rates below those which such countries would probably have had to pay to other commercial sources (and, since 1966, below those charged by the IBRD itself on loans to more advanced countries).

Private capital has been put at the disposal of the developing countries in one other important way, namely, in the financing of ordinary export trade, particularly investment goods. As competition among the industrial countries intensified in the course of the 1950's, the provision of credit became an integral part of most export transactions. Though efforts were made to moderate the competitive easing of credit terms, maturities of over five

years became increasingly common, especially as Governments stepped in with relatively low-cost means of insuring such credits against various contingencies. Thus institutionalized, these Government-guaranteed export credits became a significant source of additional capital for developing countries: over the 1956-1966 period, they provided an average of rather more than \$0.5 billion a year. Their growth has not been an unmixed advantage, however, for, being of relatively short maturity and sometimes at high rates of interest, they have tended to complicate the task of debt management in a number of developing countries, especially where—since they are contracted by the private sector and are not necessarily connected with a foreign exchange producing or conserving asset—the prospective over-all incidence of repayments has not been kept under adequate surveillance.

The involvement of Governments in the provision of resources to developing countries has not been limited to measures facilitating or encouraging the movement of private capital. On the contrary, the initial attempts to provide resources specifically for development purposes were organized by Governments in the form of technical assistance—as in the case of the United States Point Four programme and through the co-operation mechanism of the Colombo Plan in South-East Asia. Even before that, official transfers were being made for reconstruction purposes to countries affected by the war. United States aid, along the lines of the Marshall Plan in Europe, was made available to the Republic of China (almost \$300 million by 1950) and Indonesia (\$100 million). In 1951, smaller amounts were also disbursed in Burma, India, the former Indochinese States and Thailand. And in 1952, with the launching of a more general United States assistance programme, disbursements were made in no less than thirty-eight countries (nineteen in Latin America, fifteen in Asia and four in Africa). At the same time, expenditures on colonial welfare and development were being stepped up by France and the United Kingdom.

More closely linked with rehabilitation were the reparation payments made by the Federal Republic of Germany to Israel and by Japan to the war-damaged countries of South-East Asia. The payments began to taper off in the mid-1960's but until then they accounted for between \$0.1 and \$0.2 billion a year in bilateral resource transfers.

Technical assistance expenditures, on the other hand, have continued to climb: by 1966, they had reached a total of \$1.2 billion and over the 1960's averaged about \$1 billion a year. Other bilateral grants—for budget support and development programmes—also rose rapidly in the 1950's but turned downwards in the 1960's: over the period 1956-1966, they averaged about \$1.6 billion a year.

<sup>31</sup> The most recent review of these problems is to be found in *Foreign Investment in Developing Countries* (United Nations publication, Sales No.: E 68 II.D.2).

One of the reasons for the decline in grants has been a move on the part of some of the donor countries—notably the United States—to bring the terms of transfer into closer alignment with those applying to official flows from other advanced countries. This process of “harmonization”—which has involved the lowering of high interest rates as well as the raising of low rates—was stepped up under the pressure exerted on the United States by a deteriorating external balance. One result is reflected in a more or less continuous rise in the volume of bilateral lending: it reached \$2.2 billion in 1966 and averaged about \$1.2 billion over the 1956-1966 period.

Throughout the 1950's, the number of developing countries becoming beneficiaries of these official flows increased steadily. The distribution of funds, however, remained strongly influenced by political ties (as in the case of some of the western European donors and their dependent territories or ex-dependencies) or by security considerations (especially in the case of the United States where the main enabling legislation was in fact entitled the Mutual Security Act).

In the mid-1950's when wheat surpluses began accumulating in the United States, a new resource stream was set in motion and over the next ten years there was a flow of food aid averaging about \$1 billion a year.

Most of these bilateral flows have had a multilateral counterpart. For as the need was recognized or as the resources became available, efforts were made to harness the international agencies—or even to create new organs such as the United Nations Special Fund, the International Development Association (IDA) and the World Food Programme (WFP)—to administer at least a small part of the transfer process. Averaged over the period 1956-1966, the developed market economies contributed about \$0.4 billion a year for multilateral disbursements in various forms.

As the terms of trade moved against the developing countries in the 1950's and their external balance grew more precarious, the need for additional resources increased, and Governments in the more advanced countries became more involved in the transfer process. In the course of the decade, the flow of resources to the developing countries moving through official channels virtually doubled—it reached about two-thirds of the total flow by the beginning of the 1960's. Official involvement on this scale was something quite new in international economic relations: in the space of fifteen years, a revolutionary change had taken place in attitudes and policies regarding global economic development. The process culminated in the acceptance by the United Nations General Assembly of resolution 1522 (XV) formally

relating the transfer of resources to developing countries to the income of the more advanced countries.

In many ways, 1961 marked the zenith of the formative period. It saw the adoption not only of a target for resource transfers from the more advanced countries but also of a target for the rate of economic growth in the developing countries. It saw a move from “mutual security” to “international development” in the United States enabling legislation. It saw the establishment of the IDA for long-term low-interest lending and of the IDB as the first institution for financing development on a regional basis.

Since then, the imbalances that have dogged the major donor countries have cast a darkening shadow over the foreign aid scene. The over-all volume of transfers has increased much less than the national income of donor countries so that the target was further from fulfilment in 1966 than when it was set five years earlier. And the usability and development potential of the transfers was markedly lower: more were denominated by the donor, loans had increased at the expense of grants, and the use of a high proportion of the funds was restricted to the purchase of the donor's exports.

Notwithstanding this gloomy record, certain positive features are discernible, among them some that are of longer-run significance and can be expected to yield benefits in the 1970's. There are signs that the role of external aid is being viewed in a more rational perspective in many of the developing countries—as a supplement to the domestic development effort and not as a substitute for it. In this context, the running down of exporters' wheat stocks and the success of farm production management in the United States cannot but be viewed as a change for the better: both agricultural innovation in the developing countries and international food aid are now more likely to be examined on their merits and in the light of development needs.

The institutional experiments that have been under way in the most recent period also point to a better understanding of the relationship between internal and external resources. International machinery is being created to permit individual developing countries to be the focus of attention and decision in respect of external aid. This should allow local needs and priorities to play a more determining role in shaping the composition and flow of external resources and reduce the influence of whatever pressures exist in particular donor countries and agencies to maintain a certain geographic or political distribution in their aid provisions.

It would be unrealistic, however, to assume that the convenience of donor countries and agencies will not continue to be a major determinant of the nature and direction of aid flows. Almost all private

flows are by their very nature implicitly based on donor-centred criteria. And official flows are always likely to be influenced by locally computed cost considerations and by the relative ease or difficulty experienced by donor Governments in obtaining various types of resources for transfer. These factors serve to enhance the importance of such mechanisms as aid consortia and consultative groups, which facilitate the lining up of the development needs of a particular country on the one side and the arraying of potentially available resources from various donor countries on the other. If they are constructively used by all parties to the resource transfer process, they ought in principle to contribute significantly towards improving the efficiency of aid allocation and utilization. In its own way, the evolution of the United Nations Development Programme should make an essentially similar contribution towards elevating the individual developing countries to a central position in the determination of the aid activities and allocations of the various participating agencies.

The extent to which these institutional innovations do in fact succeed in raising the quality of aid will depend not only on the willingness of donor countries and agencies to accept recipient-based criteria for the priority and appropriateness of particular resource transfers but also on the effectiveness of the development planning process in the recipient countries concerned. In the long run that is where the problems have to be solved, and the suitability in form and volume of the flow of resources from the rest of the world can be judged

rationally by recipient criteria only in proportion to the effectiveness with which obstacles to growth are identified, reasonable objectives and development strategies determined, and domestic resources mobilized in the developing countries themselves. In some cases, assistance with this very planning process is the most urgent need of all.

If the disappointments of recent years have served to deflate false hopes of early solutions to growth problems through the provision of external resources and to turn attention to ways and means of improving the effective quality of aid, they cannot be allowed to contribute to the opposite error of downgrading the importance of the role of the more advanced countries in the development of the developing countries. The latter now have an accumulated external debt—public or publicly guaranteed—well in excess of one year's export earnings, equivalent to about \$30 per inhabitant. To service and repay this now absorbs about one-eighth of current export receipts—a proportion that has been rising steadily in recent years. The incidence of this debt burden is very unequal, but merely to cite the aggregate is to suggest the difficulty the developing countries are likely to encounter in financing future imports on a scale sufficient to permit them to accelerate their rate of growth. In this sense, it is the more advanced countries that hold the key to the continued economic growth of the less developed. And from a global viewpoint, it is the key to the more productive use of a large proportion of the world's supply of labour and natural resources.

