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**THE  
UNITED  
NATIONS  
DEVELOPMENT  
DECADE**

**Proposals for action**



**UNITED NATIONS**

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**Department of Economic and Social Affairs**

**THE UNITED NATIONS  
DEVELOPMENT DECADE**

**Proposals for action**

*Report of the Secretary-General*



**UNITED NATIONS**

**New York, 1962**

NOTE

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## P R E F A C E

On 19 December 1961, the General Assembly of the United Nations designated the current decade as "the United Nations Development Decade, in which Member States and their peoples will intensify their efforts to mobilize and to sustain support for the measures required on the part of both developed and developing countries to accelerate progress towards self-sustaining growth of the economy of the individual nations and their social advancement". The aim would be "to attain in each under-developed country a substantial increase in the rate of growth, with each country setting its own target, taking as the objective a minimum annual rate of growth of aggregate national income of 5 per cent at the end of the Decade". The full text of General Assembly resolution 1710 (XVI), containing this decision, is reproduced in annex I of this report. In the same resolution the Secretary-General was requested to develop proposals for the intensification of action in the fields of economic and social development by the United Nations system of organizations to further the objectives of the development decade.

The proposals which the Secretary-General has prepared for the consideration of the Economic and Social Council are set forth in the present report. In the preparation of this report, the Secretary-General held intensive consultations with the specialized agencies and has taken into account a number of suggestions which they have made. The written material furnished by the specialized agencies for this purpose has been reproduced in United Nations document E/3613/Add.1.

In accordance with the same General Assembly resolution, the Secretary-General also invited Member Governments to make proposals concerning the contents of a United Nations programme for the decade and the application of such measures in their respective plans. The replies from Governments, which, because of the time factor, could not be taken into account in the present report, have been reproduced as addenda to United Nations document E/3613.



## FOREWORD

It is an extraordinary fact that at a time when affluence is beginning to be the condition, or at least the potential condition, of whole countries and regions rather than of a few favoured individuals, and when scientific feats are becoming possible which beggar mankind's wildest dreams of the past, more people in the world are suffering from hunger and want than ever before. Such a situation is so intolerable and so contrary to the best interests of all nations that it should arouse determination, on the part of advanced and developing countries alike, to bring it to an end. The United Nations has recognized the need for action by designating the current decade as the United Nations development decade. We can say with confidence that the means can be found if only there is the will to achieve the end.

At the opening of the United Nations development decade, we are beginning to understand the real aims of development and the nature of the development process. We are learning that development concerns not only man's material needs, but also the improvement of the social conditions of his life and his broad human aspirations. Development is not just economic growth, it is growth plus change. As our understanding of development deepens, it may prove possible, in the developing countries, to compress stages of growth through which the developed countries have passed. It may also be necessary to examine afresh the methods by which the goals of development may be attained.

During the past decade we have not only gained greatly in understanding of the development process and what it requires, but we have also achieved much. In particular, we have now at our disposal such instruments of effective action as the International Bank and the International Monetary Fund (with their newly strengthened resources), the International Development Association and the International Finance Corporation, the United Nations Special Fund, the Expanded Programme of Technical Assistance, special programmes such as the World Food Programme and the United Nations Children's Fund, and the regular programmes of the various United Nations Agencies and of the United Nations itself. The resources of these various channels of proven effectiveness should be strengthened as an essential pre-condition for the success of the development decade. As new problems and new opportunities emerge, the instruments will evolve with them, as has been the case in the past.

The United Nations itself, quite apart from its own operational activities, has also proved its value as an international forum for discussion. A number of the developments, broadly described in chapter I,

following, which have helped to create the conditions for the launching of the development decade, had their origin in discussions and in the gradual change of attitudes made possible by the exchange and confrontation of views in United Nations organs.

The basic problem in the present situation is to find ways in which the express desire of the advanced countries to help the developing countries can be translated into effective action. New methods of technical co-operation, added to those already well tried, will have to be found to take full advantage of the new economic and technological possibilities which have emerged in recent years.

The main economic objective for the decade is to create conditions in which the national incomes of the developing countries not only will be increasing by 5 per cent yearly by 1970, but will also continue to expand at this annual rate thereafter. If this can be done, and if the population of the developing countries continues to rise at its present rate of 2 to 2½ per cent yearly, personal living standards can be doubled within twenty-five to thirty years. If, however, the growth of population should be even more rapid by the end of the decade than it is now—and there are indications that in a number of countries the annual rate of increase is already 3 per cent or higher—it will take correspondingly longer to double living standards.

This objective for 1970 is within our reach, given a greater willingness among both the developing and the advanced countries to make the efforts and sacrifices required. And yet it is ambitious, for if achieved it would open up for a significant number of under-developed countries the prospect of a real improvement in their conditions of life. In particular, it offers hope for the younger generation of today.

A better understanding of the nature of development has resulted in the clarification of a number of issues as being irrelevant to the fundamental problems of development; for example, the demarcation of the public and private sectors in economic life, agricultural development *versus* industrial development, and education *versus* vocational training. There has perhaps been less progress in recognizing the nature of the relationship between aid policies and trade policies, but even here there are signs that a more enlightened view may be making headway.

Meanwhile, there has been increasing appreciation of the need for a number of new approaches. These include:

1. The concept of national planning—for social as well as for economic development. This is central to all the proposals for intensified action by the United Nations system during the development decade outlined in this report. Former objections to planning, based largely on a misunderstanding of the role envisaged for the private sector in most development plans, have died away. It is now generally appreciated that the purpose of a development plan is to provide a programme of action for the achievement of targets based on realistic studies of the

resources available. Planning is proving to be a potent tool for the mobilization of existing and latent resources—human and material, public and private, domestic and external—available to countries for the achievement of their development aims. It has been shown that vigorous efforts are more likely to result if national and sectoral objectives are defined and translated into action programmes.

2. There is now greater insight into the importance of the human factor in development, and the urgent need to mobilize human resources. Economic growth in the advanced countries appears to be attributable in larger part than was previously supposed to human skills rather than to capital. Moreover, the widening of man's horizons through education and training, and the lifting of his vitality through better health, are not only essential pre-conditions for development, they are also among its major objectives. It is estimated that the total number of trained people in the developing countries must be increased by at least 10 per cent a year if the other objectives of the decade are to be achieved.

3. One of the most serious problems facing the developing countries is increasing under-employment and unemployment. This increase is not confined to countries already experiencing population pressures, although rapidly rising population is undoubtedly a major aggravating factor. Far-reaching action will be required if the fruits of economic progress are to benefit all the inhabitants of the world.

4. The disappointing foreign trade record of the developing countries is due in part to obstacles hindering the entry of their products into industrial markets, and in part to the fact that production of many primary commodities has grown more rapidly than demand for them. It is appreciated that "disruptive competition" from low-income countries may be felt by established industries in high-income countries. Yet, precisely because they are so advanced, the high-income countries should be able to alleviate any hardships without shifting the burden of adjustment to the developing countries by restricting the latter's export markets. A related problem to be solved is that of stabilizing the international commodity markets on which developing countries depend so heavily. Progress could certainly be made if the main industrial countries were to devote as much attention to promoting trade as to dispensing aid.

5. The acceptance of the principle of capital assistance to developing countries is one of the most striking expressions of international solidarity as well as enlightened self-interest. If such assistance increases to, and maintains, a level of 1 per cent of the national incomes of the advanced countries during the development decade, as suggested by the General Assembly, this will represent yet another essential contribution to the success of the decade. At the same time, there is a need for pragmatism and flexibility in determining the forms of capital flows and aid, in relation both to the needs of the developing countries and to the shifting balance of payments position of assisting countries.

6. Towards the end of the fifties the importance of laying an adequate groundwork for large-scale investment programmes came to be widely recognized. Many developing countries lack any detailed knowledge of their resources. However, even where potential investment opportunities can be identified, it may be impossible to implement them in the absence of one or more of the necessary factors of production—labour, capital, and entrepreneurial and technical skills. Within the United Nations, the Special Fund has concentrated on pre-investment work, paying special attention to surveys and feasibility studies of natural resources, technical and vocational training and the establishment of institutions for applied research. It is estimated that total expenditure on pre-investment work must rise to a level of about \$1 billion a year by 1970, if the objectives of the decade are to be reached. This is about double the present rate of expenditure.

7. A crucial area for intensified pre-investment activity is the surveying and development of natural resources, including water, minerals and power. In the development of water resources, in particular, the United Nations system may have a significant part to play. Nearly all the world's great rivers flow through several countries, and their development is a problem requiring regional and international co-operation.

8. The potentialities of modern technology and new methods of research and development for attacking the problems of the developing countries are as yet only dimly perceived. Since the Second World War it has become clear that new techniques permit the solution of most scientific and technical problems once they are correctly posed. However, too little effort has been directed towards posing or solving the problems of the developing countries, although many of them would appear to present no insuperable difficulties; for example, the problems involved in developing a sturdy piece of mechanical equipment which can be kept running with very little maintenance should be less than those involved in designing and launching a permanently operating space satellite. It also seems desirable to stimulate research on the social problems of developing countries entering upon a period of rapid social change.

9. If the skills of the advanced countries are to be successfully adapted to the problems and conditions of the developing countries, the former must be willing and able to make available the necessary resources of skilled personnel. Indeed, it may be that the shortage of such highly skilled personnel, rather than a shortage of material resources or finance, will be the greatest obstacle to action in the development decade unless new steps are taken. Technical co-operation field workers or field-teams should no longer be isolated but work in close contact with those institutions in the advanced countries which have most knowledge of the problems they will encounter. Ways must also be found for the foreign experts to participate in setting up institutions which will take over and carry forward their work when they leave.

The success of the United Nations development decade in achieving its objectives will depend in large part on the application of such new approaches. Precisely because they are new, all their implications cannot yet be fully seen. They may be expected to change many existing attitudes and approaches.

The report which follows contains a number of suggestions for the intensification of the existing activities of the United Nations system, together with proposals for new departures. These range over a wide area of development problems. But an attempt has been made, in every case, to identify those areas in which action by the United Nations system might be expected to have the maximum leverage effect on development as a whole, and the maximum linkage effect in promoting advances in other sectors.

A handwritten signature in black ink, appearing to read 'U Thant', written over a horizontal line.

U THANT  
*Acting Secretary-General*



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## Notes

The following abbreviations have been used in this report :

ILO	International Labour Organisation
FAO	Food and Agriculture Organization of the United Nations
UNESCO	United Nations Educational, Scientific, and Cultural Organization
ICAO	International Civil Aviation Organization
IBRD	International Bank for Reconstruction and Development
IFC	International Finance Corporation
IDA	International Development Association
IMF	International Monetary Fund
UPU	Universal Postal Union
WHO	World Health Organization
ITU	International Telecommunication Union
IAEA	International Atomic Energy Agency
GATT	General Agreement on Tariffs and Trade
UNICEF	United Nations Children's Fund
OPEX	Operational and Executive Personnel
EPTA	Expanded Programme of Technical Assistance
ICCICA	Interim Co-ordinating Committee for International Commodity Arrangements

The word "billion" is used throughout to indicate one thousand million.

# I. SETTING AND PROBLEMS FOR THE DEVELOPMENT DECADE

## A. THE PRECEDING DECADE—ACHIEVEMENTS AND REMAINING PROBLEMS

During the previous decade there was valuable progress in various directions clearing the way for intensified action during the present decade. It came to be generally recognized that the progress of underdeveloped countries in solving this problem was accepted. This principle of partnership of the developed and underdeveloped countries in solving this problem was accepted. This principle of international solidarity was not previously applied beyond national boundaries. The resolution adopted by the General Assembly at the beginning of the development decade on "Concerted action for economic development of economically less-developed countries"<sup>1</sup> signifies the acceptance of this principle. A number of other points won general acceptance.

(i) The developing countries came more and more to realize that their share of the joint responsibility would include not only great efforts and sacrifices, but also departures from traditions and the making of economic and social reforms as the price of goals which they might set themselves for more rapid improvement of their standard of living. Consequently, their efforts came to be expressed more and more in national plans for economic and social development.

(ii) The newly accepted principle of solidarity expressed itself in greater willingness to give assistance to developing countries. Actual aid rendered increased steadily year by year and constituted a slowly rising proportion of the national incomes of the wealthier as well as the poorer countries. This is also reflected in the increased rate of lending by the International Bank and the doubling of its capital. Moreover, a recognition has been growing that part of the assistance would have to be in forms adjusted to the repayment capacity of developing countries, if it were to be consistent with its primary purpose of promoting development. The creation of the IDA expresses this recognition most clearly, as do also the unanimously agreed principles of financing development formulated within the General Assembly Committee on a United Nations Capital Development Fund.<sup>2</sup> There is also growing evidence of a desire to co-ordinate assistance in its various forms and sources, including plans for the mobilization of the domestic resources of the developing countries.

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<sup>1</sup> General Assembly resolution 1515 (XV).

<sup>2</sup> Document E/3514, paragraph 23.

(iii) The need for and techniques of development planning have been greatly clarified. They are no longer confused with unrelated extraneous issues, such as the demarcation of the public and private sectors in economic life, or the policies of a country in relation to its natural resources and foreign investors. Other irrelevant issues, such as agricultural development *versus* industrialization or infrastructure *versus* the production of goods, have also largely been disposed of. The purpose of development was also clarified as including "proper regard for its human and social aspects".<sup>3</sup> Thus, the ground has been cleared for a non-doctrinaire consideration of the real problems of development, namely saving, training and planning, and for action on them. In particular, the advantages of dealing with the various problems not piecemeal, but by a comprehensive approach through sound development planning, became more fully apparent.

(iv) The need for international action to solve problems arising from the structural weakness and instability of the terms of trade, and the consequent effect on export markets of developing countries, came to be recognized and some useful experiences and proposals were gathered during the 1950's.

(v) The decade also saw the growth of the idea of international technical co-operation and pre-investment activity, and towards the end of the decade there was spreading awareness of the great potential of latent resources and latent investment opportunities. The creation of the United Nations Special Fund<sup>4</sup> is an expression of this tendency.

(vi) Recently there has also been much more widespread realization of the importance of the human factor in economic development. Research and experience have indicated that the contribution of physical capital alone is by no means as dominant as had at one time been imagined. This realization opened up new approaches—through education, training, community development, use of idle manpower and eradication of disease—to using the vast latent human resources of the developing countries. While at the beginning of the last decade the problem of developing countries was viewed essentially as a problem of producing wealth, by the end of the decade it became widely acknowledged that the crucial factor was not production but rather the *capacity* to produce, which is inherent in people.

(vii) It was also increasingly recognized that social reform and economic strategy are two sides of the same coin, the single strategy of development. This realization came about through several intermediate stages in which an original opposition of these two ideas was replaced by a parallelism expressed in such terms as "balanced economic and social development". This ultimate identity can be best expressed by saying that the problem of the under-developed countries is not just growth, but development. Development is growth *plus* change; change,

<sup>3</sup> General Assembly resolution 1515 (XV), paragraph 3 (e).

<sup>4</sup> General Assembly resolution 1240 (XIII).

in turn, is social and cultural as well as economic, and qualitative as well as quantitative. It should no longer be necessary to speak of "economic and social development", since development—as distinct from growth—should automatically include both. A direct corollary of this new approach to development was that the purely economic indicators of progress were seen to provide only limited insight and might conceal as much as they indicated.

(viii) Trends toward regional co-operation of developing countries became apparent and developed strongly towards the end of the decade. In this, the United Nations system played an important role.

(ix) The decade saw the building up of international administrations as instruments for international action.

(x) There was also great progress in specific directions, of which perhaps control of certain diseases was particularly striking. As a result, the gap between poor and wealthier countries has been closing in terms of life expectancy—as distinct from incomes. There was also substantial gain in education.

These are indispensable foundations on which to build for a decade of development. The achievement has been described by the Committee on Programme Appraisals in its *Five-Year Perspective, 1960-1964*,<sup>5</sup> in the following words: "Great headway has been made in fact-finding and the establishment of internationally comparable statistics and other data. More than a start has been made in ascertaining needs and defining problems which call for action, private and public, national and international. Objectives have been formulated and standards set. Above all, through technical assistance a world-wide transfer and interchange of knowledge and technology has been organized, which lies at the very basis of economic and social development. As a result of all this, international organizations have become a potent factor in stimulating action by national governments and in assisting them in their efforts to improve economic conditions and raise levels of living."

The clarification of issues and problems and the broad agreement on many approaches are reflected in the decisions on economic and social development reached by the General Assembly, the Economic and Social Council and other United Nations bodies. The most recent sessions of various United Nations bodies have witnessed wide agreement on certain key approaches which would help the developing countries to cross the threshold of development. Accordingly, the decisions and recommendations made specifically during the first two years of the development decade provide a valuable framework for intensified United Nations and international action in the years to come. Their value is further enhanced by the fact that they usually embody the concurrence or agreement of a large number of countries at various stages of development and with different social or political systems.

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<sup>5</sup>United Nations publication. Sales No.: 60.IV.14, page 95.

The Secretary-General has carefully taken into account the views of governments and the agreement reached as expressed in these decisions. He believes that his proposals are in accord with them.

But changes have occurred which have led to the development of new types of problems, demanding new techniques and approaches and new thinking. In this, all agencies have contributions to make in ideas, policies and execution. Together with the greater emphasis on planning by Governments, there should be an improvement of the existing mechanisms for co-ordination of policies and execution, not only amongst the various parts of the United Nations system but between it and the non-United Nations agencies now active in the field and the substantial bilateral programmes.

A number of unsolved problems of the last decade seem to call for the most urgent treatment during the development decade. They constitute a great challenge to the United Nations organizations, as they do primarily to the people and Governments of the developing countries and those wishing to assist them. Among them are the following:

(i) In spite of the progress made in reaching agreement on principles in the field of development planning, in clarification of concepts and development techniques, and in spite of some conspicuous examples of successful and purposeful planning, the general picture was still one in which the majority of countries had either no development plans, or at best had elements of development plans in the form of general projections, or public investment programmes, or plans lacking in implementation. In most cases, the factual information required to draw up such action programmes is still lacking, as are also the planning skills to use and interpret the information. A true development plan, which is an action programme for the public and private sectors of the economy alike, takes full account of the necessary sacrifices and mobilizes the necessary resources, and offers opportunities for the development of the latent resources of the country. This kind of plan is still the exception rather than the rule.

(ii) Primary commodity prices were at a high level in the early part of the last decade, but as it went on they tended to grow progressively weaker. The proceeds which under-developed countries derived from export sales of primary commodities or of manufactured goods clearly failed to develop the dynamic growth which would be necessary to finance their economic development at acceptable growth rates. This was all the more disappointing since international trade, as a whole, showed sufficient dynamism to serve as a basis for financing economic development, if only the share of under-developed countries in the trade total could have been maintained. The well maintained stable growth in the main industrial countries was seen to be insufficient by itself to give greater stability to commodity prices. There were a number of reasons for this, including a failure to treat the exports of developing countries in a manner in keeping with the recognized primary im-

portance of the development of these exports for the balanced growth of the world economy.

(iii) As regards long-term capital flows and assistance, the total net flow to low-income countries increased considerably during the later part of the decade (more rapidly than the national incomes of the wealthier countries or of the receiving countries), but remained considerably less than 1 per cent of the combined national incomes of the wealthier countries. In spite of some progress, much of it was still made available on a basis offering no real assurance of its continuity to individual countries; it remained split up amongst a multiplicity of sources, forms and purposes; the share of multilateral aid through the United Nations system remained small. There was no clear evidence that a satisfactory basis had been found for a sustained, assured and more widely distributed flow of private capital to developing countries, nor indeed was it certain that such a flow could be expected until development had gathered more momentum. In any case, the mounting pressure of commitments for repayment of principal and interest or profits on previous investments, combined with the uncertainty and lack of dynamism of export earnings in many under-developed countries, underscored the importance of increasing the proportion of assistance in forms that would bear less heavily on the balance of payments than conventional loans. Furthermore, the fall in commodity prices in recent years has nullified much of the net increase in the assistance given to the developing countries.

(iv) Agricultural output in the developing countries increased only a little faster during the past decade than their populations. In Asia and the Far East, calorie and animal protein supplies per person are only just back to pre-war levels. In the other under-developed regions calorie supplies per person are above pre-war levels, but animal protein supplies per person are still below pre-war levels. The disparity in standards of nutrition is now greater than ever, and the number of human beings living in conditions of hunger and malnutrition is now larger than ever before in the history of the world. The rise in agricultural productivity is not sufficient at the present rate to provide the surpluses which are essential if the industrialization of the under-developed countries and accelerated growth of national incomes are to be achieved.

(v) Industrial output *per caput* increased in the developing countries during the 1950's at a rate equal to or even slightly higher than that achieved in the more advanced countries. Welcome as this fact is, only limited comfort can be derived from it, in view of the extremely small base which makes comparisons less than meaningful. While industrialization is gradually developing, manufacturing industry still accounts for less than one-fifth of the low output of the under-developed countries, and the volume of employment thus far provided by industrialization has been insufficient to prevent growing unemployment and under-employment in the developing countries.

(vi) There has been too little effort to bring science and technology to bear upon the special problems of the under-developed countries. In part, this is due to the continuing and increasing burden of armaments which makes it more difficult to direct scientific and technological attention to the problems of the developing countries. Heavy financial resources and skilled personnel, part of which might otherwise be devoted to the problems of the developing countries, are pre-empted by the armaments race. Even allowing for the continuing claims of armaments, however, it should be possible, when allocating the resources available for research and development, to allot a more reasonable priority to those problems which are of particular importance to developing countries. In the past, countries starting economic development have historically shown faster growth rates than the older industrial countries, since they were able to benefit from the accumulated stock of knowledge and technology. This historical sequence provided an element of equalization and balanced growth in the world economy until 1914, or perhaps 1929, but it has since ceased to do so. In fact, some of the older developed countries are among those with the highest growth rates. Thus, the accumulating stock of knowledge may no longer become increasingly useful to the under-developed countries, certainly not in proportion to its accumulation. Apart from the crucial lack of trained people capable of using advances in technology, the heavy capital requirements of new processes, the large scale on which they operate and their orientation towards advanced sectors make advanced technology less and less directly applicable—without deliberate direction and heavy adaptation—to the specific needs of the developing countries.

(vii) Although there has been increasing recognition that the ultimate objective of economic development is social progress, and that social reform is a necessary condition of economic improvement, these principles have not yet come to guide practical policies everywhere. Continued neglect of the social aspects of economic development might result either in stagnation in economic progress or violent reversal of the existing social order.

Thus the picture at the opening of the development decade is mixed. The under-developed countries have been making progress. Some of them developed quite rapidly—enough to demonstrate the potential of sustained growth of under-developed economies. These developing countries have usually been in an intermediate position already approaching the income levels of the more developed countries. Taken as a group, the rate of progress of the under-developed countries measured by income *per caput* has been painfully slow, more of the order of 1 per cent per annum than 2 per cent. Most indices of social progress show similar slow and spotty improvement. Moreover, the progress actually achieved in under-developed countries has often been uneven, limited to certain sectors of their economy or to certain regions or groups of countries. As a result, the disparities in levels of living within

under-developed countries are often as pronounced as those between developed and developing countries taken as a whole.

Progress toward a higher average level of living in the world as a whole is held back also by the shifting balance of population distribution which results from higher rates of population growth in developing countries than in wealthier countries. As the developing countries account for a larger and larger proportion of world population increases, they tend to offset the improvement of conditions in the world as a whole which would otherwise be brought about by the gains in individual countries. At any rate, the actual number of human beings living in distress and unacceptable poverty has almost certainly increased rather than diminished. This is the combined result of the rapid growth of population in the poorer countries and their failure to join fully in the general march of progress. Even in education, a field in which many under-developed countries have made important achievements during the last decade, the progress has not been enough to justify any complacency. In spite of the efforts to stamp out illiteracy, the number of illiterate people may increase, rather than diminish, as a result of the relentless growth of population. In India, for example, although the census figures for 1951 and 1961 show an increase of more than 40 million during the decade in the number of persons able to read and write, even this accomplishment was not enough to prevent the number of illiterates from increasing by more than 11 million in the age group 5 years and over.<sup>6</sup>

## B. OBJECTIVES OF THE DEVELOPMENT DECADE

Given the will to succeed, the first task is to define the objective. In this matter guidance is provided by the basic General Assembly resolution 1710 (XVI). The objective is to:

“...accelerate progress towards self-sustaining growth of the economy of the individual nations and their social advancement so as to attain in each under-developed country a substantial increase in the rate of growth, with each country setting its own target, taking as the objective a minimum rate of growth or aggregate national income of 5 per cent at the end of the Decade;”

The emphasis on the “individual nations” and on “each country setting its own target” is significant. The proposals of the Secretary-General are based on the same assumption, namely that the key to the problem of accelerating development can only be found in each individual country. Each country has to determine its specific objectives, conditions and

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<sup>6</sup>For the purpose of this comparison, the census figures have been adjusted to take account of differences in geographical coverage of the 1951 and 1961 enumerations. The uncorrected figures show an even larger increase in the number of illiterates.

development potential, preferably embodied in a comprehensive development plan. In line therefore with the emphasis of the resolution, any global requirements for fulfilling these objectives can only be assessed during the second stage, as a result of examination and mutual agreement on the basis of national development plans. The collective will to succeed must be directed towards partnership in the implementation of national plans. It need hardly be said that this does not preclude—in fact, it necessitates—regional or even wider co-operation of under-developed countries with each other, nor does it in any way preclude global action where required, particularly in such matters as trade.

In so far as the resolution does provide a quantitative objective, it is to achieve a minimum annual rate of growth of aggregate national income of 5 per cent in all—or at the very least, the great majority—of the under-developed countries by 1970. It may perhaps be assumed that to achieve this minimum position at the end of the decade, the average rate of increase of the aggregate incomes of all under-developed countries during the remainder of the decade should not be less than 5 per cent and it would be desirable if towards the end of the decade it could be as high as 6 per cent or more. The magnitude of the global efforts required might be envisaged on the basis of these assumptions.

The present best estimate is that the growth rate of national incomes of all under-developed countries, together, is about  $3\frac{1}{2}$  per cent per year. The immediate task, therefore, will be to raise this growth rate during the coming few years by perhaps  $1\frac{1}{2}$  per cent to at least 5 per cent and to increase this rate by a further  $1\frac{1}{2}$  per cent to over 6 per cent per annum at the end of the decade. It must be emphasized, however, that the real objective of the development decade cannot be formulated in global terms, but must be decided country by country, with minimum country targets in view.

A growth rate of aggregate real incomes of 5 per cent per annum—assuming a continuation of the present rate of population increase—would permit a doubling of the personal standard of living (even given the necessary rates of savings and re-investment of incremental incomes) within a period of twenty-five to thirty years; this would mean a real improvement within the working lifetime of individual citizens. It should be emphasized, however, that a 5 per cent annual increase in aggregate national income would not be enough to bring a very rapid rise in *per caput* income in the countries where population is growing most rapidly. Rates of population growth in a number of African, Asian, and Latin American countries have recently risen into the range of 3 to  $3\frac{1}{2}$  per cent per annum and a projection of recent mortality trends implies that population growth at such rates is likely to become more and more prevalent in these parts of the world during the next decade, unless the birth rates drop sharply. Under these conditions, a 5 per cent increase in aggregate income would correspond to an annual increase of only  $1\frac{1}{2}$  to 2 per cent in *per caput* income and 35 to 50 years would be required to double *per caput* income.

It is useful to realize that a special premium or bonus is attached to any intensification of progress in under-developed countries. If the rate of growth of aggregate incomes is 3 per cent, while population increases by 2 per cent, the improvement of the average standard of living would only be 1 per cent and two-thirds of the increase is required to provide for the increase in population. But if the increase in aggregate income is doubled to 6 per cent, the improvement is raised from 1 per cent to 4 per cent; i.e., it is not doubled but quadrupled. This consideration should act as a special spur to intensify efforts, both within and outside the under-developed countries, to gain an early momentum and save in the long run on the resources needed for a task which all agree will have to be achieved sooner or later.

A related consideration is that if the acceleration of the rate of growth of incomes goes hand in hand with improvements in internal income distribution, and if the social benefits of the improvements are widespread, the number of people living below an acceptable minimum standard can be reduced at an even faster rate than the mere increase in aggregate income would suggest. It is true that the General Assembly resolution lays down a precise quantitative target only for the increase in aggregate incomes, and that there is no similar quantitative target for changes in income distribution. We can, however, take it for granted that the 5 per cent growth target established by the resolution also implies that the increment in income thus achieved should be wisely used for the benefit of the poorer sections of the population and should result in a degree of social progress which is at least in "balance" with the rise in aggregate national income. Normally, this would mean that the rise in aggregate incomes must be associated with an income distribution more equal, or at least not more unequal, than at present. The General Assembly in its resolution refers specifically to social advancement, social development, land reform, the elimination of illiteracy, hunger and disease, improvements in education and similar measures of social progress.

If a higher proportion of the increased incomes can be saved and productively invested or spent on training, education, research, discovery of natural resources and similar current developmental expenditures, the need for external assistance can be reduced.<sup>7</sup>

The above considerations should be an additional incentive to accelerating the growth of incomes in under-developed countries towards the target stipulated by the General Assembly. They also indicate the directions in which initial efforts should be primarily directed: the reduction of internal disparities within under-developed countries, the achievement of a high rate of savings and investment and the achieve-

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<sup>7</sup> For instance, if one-fifth of the increased income generated were ploughed back into investment of reasonable productivity, external investment resources could be replaced by domestic investment within twelve to thirteen years. This statement refers to aggregate resources—the cessation of external investment resources might still create balance of payments difficulties for the developing country.

ment of a high level of training and current developmental expenditures. As will be seen, these guideposts determine the action programme for the development decade here proposed. The target can be achieved. The experience gained in the last decade, and specifically the experience of the United Nations system in its pre-investment as well as in the financing of activities enables us to say with virtual certainty that nearly all the under-developed countries have in their physical and human resources the potential means for achieving decent standards of living for their people. The problem is to mobilize these latent physical and human resources and get them into production.

We further know that careful development planning can be a potent means of mobilizing these latent resources by a rational solution of the problems involved.

A "real" development plan should cover at least the following elements:

(i) Objectives and aggregate targets, primarily in terms of national income and employment;

(ii) A public investment programme with distribution of development expenditures amongst major sectors, chiefly for building up the economic and social infrastructure;

(iii) A projection of private investment among various major sectors;

(iv) Policy measures (especially in the fiscal, financial, foreign trade, foreign exchange and foreign investment fields) to stimulate, direct and influence private investment;

(v) A programme, co-ordinated with (ii), for financing public and private investment from domestic and foreign sources, including particularly the government budget and foreign exchange budget;

(vi) Sectoral programmes containing individual projects; and

(vii) Policies aiming at basic institutional changes, including land reform, labour policy, etc.<sup>8</sup>

Real development planning involves a combination of all these elements in systematic relationship with one another. Provided that such a combination can be achieved—or even a reasonable approximation to such an ideal combination—experience shows that this in itself can serve to speed up present rates of progress significantly.

We may add that development planning is real only if it enrolls the co-operation of people by basing development on their aspirations and using the results of development as a basis for social as well as economic progress. In the words of the Economic and Social Council's Committee on Programme Appraisals: "One of the greatest dangers in development policy lies in the tendency to give the more material

<sup>8</sup> This list is taken from "A Decade of Development Planning and Implementation in the ECAFE Region", ECAFE Conference of Asian Economic Planners, New Delhi, 1961.

aspects of growth an overriding and disproportionate emphasis. The end may be forgotten in preoccupation with the means. Human rights may be submerged and human beings seen only as instruments of production rather than as free entities for whose welfare and cultural advance the increased production is intended. The recognition of this issue has a profound bearing upon the formulation of the objectives of economic development and the methods employed in attaining them.”<sup>9</sup>

The private inducement to invest and produce will also be greatly strengthened if the individual, planning his investment or activities, can see a picture of what is likely to happen in the rest of the economy. Uncertainty in regard to this picture will in itself reduce investment and thus contribute to stagnation. If the picture formed is one of balanced expansion, and if the Government’s record inspires confidence that this expansion will be carried out, the effect may be to release powerful incentives to invest, and also to bring to light sources of finance for the additional investment thus motivated. Thus, if targets are reasonably set and consistently related, and if there is a will and an ability to implement them, they are more likely to be achieved than if they had never been set.

Another factor which will facilitate the achievement of the basic objective of the decade is the tremendous progress of modern science in developing techniques capable of expanding productivity enormously. It is true that this progress has so far been of limited value to the under-developed countries, for lack of specific direction towards their problems. This very neglect, however, implies the existence of a large potential of physical and human resources and of development planning.

The conclusion that these objectives, when considered as the objectives of a joint task, are within the means at the world’s disposal, is also reached in relation to the external assistance which may be required during the decade. The national incomes of the wealthier countries are now a high multiple of the aggregate incomes of the developing countries, of the order of 10:1. This means that the diversion of comparatively small proportions of the national incomes of wealthier countries represents a major addition to the national incomes of the developing countries and an even greater addition to their possible volume of investment. A flow of capital representing 1 per cent of the incomes of the developed countries adds about 10 per cent to the national incomes of the under-developed countries, and about 100 per cent to their present net capital formation. If invested at a normal productivity ratio—which is based on the assumption of reasonable absorptive capacity and ability to mobilize the complementary domestic resources in the developing countries—this would result in an increase in their national incomes of about 3 per cent. As pointed out before, this process, if combined with a sufficiently high rate of savings and productive re-investment, could be self-terminating and growth could be-

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<sup>9</sup> *Five-Year Perspective, 1960-1964*, United Nations publication, Sales No.: 60.IV.14, page 25.

come self-sustained, within a reasonable time. If the net flow of capital on suitable terms could be raised now to 1 per cent of the combined national incomes of the wealthier countries, and effectively used, this alone should raise the growth rate of aggregate incomes of developing countries at least half way from the present  $3\frac{1}{2}$  per cent to the initial target of 5 per cent each year.

The external foreign exchange resources required for increasing the growth rate of aggregate incomes from  $3\frac{1}{2}$  per cent to 5 per cent and later to 6 per cent and more, could also come from an improvement in the trade position of the developing countries. If their terms of trade could be improved by 10 per cent over the present level and kept at this level during the development decade this would go a long way to providing the additional resources required for the initial acceleration of growth. If, in addition, under-developed countries were also enabled to improve their present share in total world trade from 26 per cent to 28 per cent and maintain this share throughout the decade, within a total world trade expanding at recent rates, the foreign exchange requirements for the accelerated rate of growth would be covered. The startling thing about these hypothetical improvements is that they would do no more than restore the relative position of the under-developed countries during the mid-1950's. This, of course, should not be taken as implying that it will be easy to reverse the unfavourable trends in the trade of under-developed countries, some reasons for which are deep-rooted. Nor would the restored trade necessarily be the same kind of trade by commodities, direction or organization as in the 1950's. However, even with such qualifications, the above speculations as to the orders of magnitude involved should help us to see the task in its proper perspective.

Finally, reference should be made to the heavy expenditures on armaments which many countries now incur. The previous discussion has shown that the external means towards fulfilling the objectives of the development decade are within our grasp. This would be even more so if some measure of disarmament could be achieved during the decade.

The present expenditures on armaments alone are about equal to the aggregate of national incomes of all under-developed countries and about ten times their net capital formation. By the unanimous and since repeated General Assembly declaration, contained in resolution 724 (VIII), governments agreed to devote a portion of the savings achieved through internationally supervised world-wide disarmament to an international fund, within the framework of the United Nations, to assist development and reconstruction in under-developed countries. The implementation of this pledge would in itself go a long way towards providing the external resources required for the goals of the development decade. It can be estimated that the acceleration of growth of aggregate incomes in under-developed countries from perhaps  $3\frac{1}{2}$  per cent now to 5 per cent would require no more than the diversion of about 10 per cent of the savings resulting from a reduction in armament

expenditures by one-half. The recent report, *The Economic and Social Consequences of Disarmament*,<sup>10</sup> pointed out that since

“the competing claims in developing countries are also urgent, there is a serious possibility that the financial resources released by disarmament might be rapidly absorbed by purely national aims. It is therefore desirable that an appropriate proportion of these resources should be allocated to international aid in its various forms simultaneously with their use for domestic purposes.”

To state all these grounds for a cautious confidence that the basic objective of the development decade is feasible is in reality to state *tasks* which have to be completed to make our hopes come true. The very fact that these tasks have not yet been fully accomplished despite the progress made in the last few years is an indication that they are formidable. They are:

(i) The more systematic survey, development and utilization of physical and human resources in under-developed countries;

(ii) The formulation of true development plans providing for maximum mobilization of domestic resources and the effective utilization of external assistance;

(iii) An improvement in the machinery of administration, in institutions and in production incentives in order to meet the new and increased demands arising from these development plans;

(iv) A redirection of science and technology to increase the attention given to specific problems of low-income countries;

(v) An increase, and subsequent more vigorous growth, of the export earnings of under-developed countries;

(vi) An increased and a more assured flow of capital on suitable terms to the under-developed countries, to be further added to if the declaration adopted in General Assembly resolution 724 (VIII) is put into effect.

These six major tasks have to be performed in a specific setting which cannot be disregarded. Prominent features of this setting are the trend towards regional organizations of countries; the fact that many countries are newly independent or will be so during the development decade, with the consequence that African problems have come strongly to the foreground in the world picture; and the greatly heightened consciousness of social as well as economic objectives and of social as well as economic policies. Some elements of these new developments could help and some may hinder the achievement of the objectives of the development decade. It will therefore also be necessary to ensure that the potential affirmative contribution of these new developments is fully realized. The following proposals for intensified action in the fields of economic and social development by the United Nations system of organizations are submitted to Governments, with confidence that the task is feasible.

<sup>10</sup> United Nations publication, Sales No.: 62.IX.1.

## II. THE APPROACH TO DEVELOPMENT PLANNING

In its *Five-Year Perspective, 1960-1964*, the Committee on Programme Appraisals of the Economic and Social Council reported two years ago that "National development plans are now an established pattern in many countries throughout the less developed regions of the world and their formulation and execution are a matter of profound concern to those countries. . . . These trends provide an opportunity that needs to be further developed for concerted action within the United Nations family".<sup>1</sup> As the previous chapter has explained, impressive unanimity has been achieved regarding the potential value of development planning, and progress has been made regarding methods. All the members of the United Nations system emphasize the enhanced effectiveness of their work if it can be linked with plans and policies reflecting firm and known priorities of the government, derived from a development plan. This applies both to planning in general and to plans for specific sectors such as education, agriculture, health, etc. The opportunity for concerted action, mentioned by the Committee on Programme Appraisals, remains a major task of the development decade.

It is proposed that during the decade a high priority item for intensified action by the United Nations system should be assistance to each under-developed country which desires it in working out sound development plans, and assistance in carrying them out by the mobilization of its own resources and by securing supplementary external assistance and co-operation. The elements of a sound general plan have been previously described. The United Nations system itself should be willing and able to offer, or help any country to obtain, the full range of services required to prepare or revise such a development plan and action programme best suited to each country's resources and needs. It should also be able to offer services to increase the available information on these needs, resources and development potential as far as possible, in preparation for current or subsequent development plans.

It is far simpler to state these aims than it will be to achieve them, for they imply the availability of substantial resources, not only of funds but also of staff. To put into practice any substantial portion of the specific proposals made in this report would require the enlistment of a large number of economists, financial experts, engineers, sociologists, community planners and the like, that is to say staff possessing kinds of professional competence and skill which are already in short supply. Experience on both the international and national levels points to the practical difficulties of building up cadres of professional

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<sup>1</sup> United Nations publication, Sales No.: 60.IV.14, page 91.

talent over a long term; to do so within the compass of a few years, as will be essential if the substantive objectives outlined in this report are to be realized within the next decade, will be that much harder.

In what follows in this chapter—as indeed in the rest of the report—references are made to the types of action the United Nations system has taken in the past and proposes to take in the future. The proposals made in this report do not in any way pre-judge the question as to which particular branch of the United Nations system would take the leadership in the action proposed. Normally, the action proposed in this report for the United Nations system refers to action by the Organization and/or one or several of the related agencies working in concert.

The area for action taken by the United Nations system can be conceived in three stages: first, help in obtaining information for planning, in the establishment of planning machinery and in methods of planning; second, help in the formulation of the plan; and third, assistance in implementing the plan. To achieve these objectives will require a number of steps, many of them in the nature of intensifying action already taken or possible now, while others would open up new fields of activity for the United Nations system.

The role here proposed for the United Nations system in helping countries to work out development plans may not by any means apply uniformly to all developing countries in all regions. In fact, the exact role and scope of United Nations support is likely to be different in each country. For instance, some countries may perhaps prefer to work out their strategy directly with regional or bilateral development assistance agencies.

Some developing countries have attained by themselves satisfactory methods of planning, and may need limited or no assistance. It is believed, however, that a number of countries would find it difficult to work out a proper development plan by themselves and would prefer to receive major assistance in this area from within the United Nations system. Particular reference may be made in this connexion to Africa generally and to the newly independent countries specifically, as well as to smaller countries in other regions.

The United Nations system is well placed to undertake this task. It can draw on a world-wide pool of experience and technical knowledge in many diverse fields, and a range of contacts which are unparalleled, if they can be brought to bear upon the problems of each country in a unified and swift manner. The services offered by it are impartial and without political strings or implications. It has no vested interest in specific sectors as against others, or in specific types of development or in specific projects for financing. Yet, while being outside local rivalries and disputes, the United Nations system is not an outside body; it embodies the idea of partnership and the assisted country is itself a Member. By their constitutional procedures, the United Nations organizations act only on the request of Governments, although their advice and suggestions are independent of Governments.

The United Nations organizations would assist the Government in formulating its development plan, give it what technical assistance it needs to execute the plan and make plain their faith in the soundness of the plan and in the capacity of the country to carry it out; at the same time they would make their expert knowledge and other resources available to all those willing to assist. The latter action in itself could go a long way towards enabling assisting countries and institutions to fit their aid into a framework of priorities and give them greater confidence that their help would be effectively used. A great number of time-consuming, individual discussions and studies would be avoided. Moreover, some countries wishing to give aid, but not having the necessary machinery or contacts for local assessment or negotiations, might make contributions which would not otherwise materialize. In the case of technical assistance and pre-investment specifically, if the necessary local (counterpart) expenditures were included in development plans and annual budgets based on them, much of the assistance could be given with less detailed negotiations about local counterpart expenditures and in respect of individual projects. The action proposed is, of course, not new. The United Nations system has been offering precisely this kind of service for years. What is in view is rather an intensification of this type of activity and an expansion of its scope over the next decade.

The suggested intensified action includes action at United Nations Headquarters and at the headquarters of the specialized agencies, as well as action at the regional and national level. This is the order in which the proposals are presented.

#### A. ACTION BY UNITED NATIONS STAFF IN NEW YORK AND GENEVA

It was in response to the needs of under-developed countries for assistance in drawing up development plans and formulating national development policies that the General Assembly proposed the establishment of an Economic Projections and Programming Centre, with sub-centres in the regions. One of the principal functions of the Centre and other units of the Secretariat would be to carry out, in co-operation with the regional economic commissions and regional development institutes as well as with the specialized agencies concerned, a programme of long-term projections of world economic and industrial trends. A primary aim of these projections would be to facilitate the drawing up of national development plans. If development policies are to be successful they must be formulated in the light of expected international economic trends. In part this is necessary to ensure that growth targets are consistent with foreign exchange availabilities. Knowledge of these trends is also an essential element in determining policies affecting the allocation of resources among various economic sectors, and especially in the export sector. The Secretariat would give similar support in the provision of vital industrial planning data.

Along with the need for projections as a basis for development planning there is an urgent need to improve techniques of planning and to provide technicians and administrators trained in these techniques. The Economic Projections and Programming Centre would contribute to filling these requirements through periodic meetings of experts and training seminars dealing with problems of projections and planning. The Centre, based on the staff work in New York and Geneva, would also co-operate with the other regional commissions and regional development institutes in rendering substantive support where required under United Nations Technical Assistance programmes in response to requests from Member Governments for aid in development planning. It would serve as a focal point for consultation and co-operation between the United Nations and the specialized agencies in the areas of economic projections and planning, and it would promote and maintain contacts with inter-governmental agencies outside the United Nations family, with national agencies, and with other institutions active in these fields. The need for a sound technical basis for development planning might also be met in part through a programme of studies which would deal with problems and techniques of planning under various economic and social systems.

#### B. ACTIVITIES OF THE AGENCIES IN THE FIELD OF DEVELOPMENT PLANNING

The International Bank's assistance in the field of development programming takes a variety of forms, a number of which will be stressed in the development decade. One will be the provision, by members of the Bank's newly established Development Advisory Service, of economic and financial advice, frequently on a long term basis, and particularly in the preparation and execution of development programmes. The Bank also expects to give still greater attention to the support of project and sector studies, designed to help its members in identifying and preparing development projects where there appears to be a possibility of ultimate Bank or IDA financing. The Bank not only helps the member concerned to find qualified consultants to carry out the work but may, in appropriate cases, organize the studies and meet part of their cost. The programme of courses of the Bank's Development Institute, where senior officials consider the practical problems that arise in the preparation and execution of development projects and programmes, is being expanded to make possible a wider variety of special courses in addition to the regular course. The consortium or consultative group approach to development financing, under which assistance is pledged and co-ordinated for support of a long-range development programme, is a recent initiative of the Bank. It has been applied in India and Pakistan and its application to a number of other countries is being considered.

The Bank expects to continue to increase the scope and variety of its technical assistance in development programming and to evolve

new techniques appropriate to new situations which may arise during the decade.

In co-operation with other agencies, notably the regional economic commissions, and the regional economic development institutes as these are established, the ILO expects to intensify its research, training and advice to governments in connexion with the development of programmes of balanced economic and social development, particularly regarding the place of employment objectives in development plans and programmes and the methods of reaching these objectives. Among the aspects of development planning to which the ILO intends to give increasing emphasis in the coming years, special reference should be made to the assessment and forecasting of manpower needs and to social programmes related to development planning, e.g. the introduction and extension of social security and the development of industrial relations institutions. The ILO and FAO are co-operating closely in planning a special long-term programme of research and operational activities designed to assist Governments to raise incomes and improve living conditions in rural communities in developing countries.

During the development decade, FAO expects to intensify its activities related to the development of agriculture as an integral part of over-all national and economic planning; it will also endeavour to see that agriculture is given its proper place in national development plans so that it can meet projected increases in the output of food and agricultural products for home consumption, internal capital formation, and to provide export surpluses for financing needed imports. Studies and projections of world market trends for agricultural commodities will be continued, and countries assisted, where desired, in applying this information in their planning. FAO hopes to assist Governments in the preparation of well-conceived and realistic agricultural development plans, in the building up of their planning machinery, and also in the training of the necessary national staff through national and regional seminars and training centres, as well as through an expanded fellowship programme. At the same time it will, in consultation with governments, work on the longer term objectives of agricultural development; that is, objectives which are consistent with the population increases projected for the next and subsequent decades. During the decade, a high priority in FAO's work will be assigned to institutional and organizational problems of agricultural development, to pre-investment surveys and to providing assistance to developing countries to operate their agricultural development agencies. FAO is not only actively associated with the various regional economic commissions, through their joint agricultural divisions, in matters of agricultural development planning, but also has its own regional and subregional offices dealing especially with the technical problems of agricultural development. Their staff plays an important part in securing intra-regional co-operation through the organization of regional meetings in specific technical fields and through the transmittal of information from country to country

on new approaches to problems and new techniques. The Forestry and Fisheries Commissions, the International Rice Commission and other specialized commissions are active in securing regional co-operation.

The main contribution of UNESCO will be to help to mobilize and to promote a fuller use of human resources required for accelerated economic growth during the decade, through the development of education and science and the spread of information. For this purpose, in association with the regional economic commissions and the specialized agencies, it will intensify its efforts initiated at the start of the decade in aiding countries to plan this development within the framework of general and balanced economic and social development, to expand their educational systems in accordance with agreed quantitative targets, to improve the efficiency of their educational systems, and to establish the teaching and research institutions and create the cadres of higher level manpower required both for their technological and their social progress.

The Executive Board of WHO adopted in January 1962 a resolution which recommended to Governments that they undertake, with the assistance of WHO if they so wish, ten-year public health programmes for the development decade, in co-ordination with other related plans in the social and economic fields. The WHO envisages team surveys in which it would participate, if so requested by governments, and it expects to continue to take the necessary steps to strengthen its services for meeting requests for assistance in national health planning.

The adoption of a resolution recommending to governments the preparation of national plans for the development of meteorological services, with specific objectives directly relating to an increase in the standard of living of the people, has been proposed to the Executive Committee of WMO for consideration in May-June 1962. It is intended that the proposed national plans should be based on the application of meteorology to agriculture and food production, water resource development, fisheries, shipping and aviation, and should be co-ordinated with the other related plans in the economic field. They should also take into consideration the need for training of scientific and technical personnel.

In drawing up the long-term programme of work which its General Conference has recommended, IAEA will give special attention to assisting developing countries in planning the phased introduction or expansion of nuclear science and technology, as a basis for planning their power and other investments.

### C. ROLE OF THE REGIONAL ECONOMIC COMMISSIONS OF THE UNITED NATIONS

While planning must be on a country-by-country basis, close regional co-operation will be increasingly necessary in coming years.

This is true for many reasons. In the first place, for many smaller countries the present markets in terms of cash buying power are simply too small to serve as a basis for national planning, and many industries may have to serve the markets of several countries if they are to be viable at all. Secondly, many essential development projects may be regional, cutting across national boundaries which are often administrative lines rather than the boundaries of true economic regions. Thirdly, if countries' plans for export promotion and import substitution are not harmonized with each other, they may become inconsistent and attempts to carry them out may do as much harm as would result from a failure to plan. Action by the United Nations system to promote the necessary co-operative action by the various countries at an early stage may be of great value. Fourthly, the promotion of intra-regional trade might help developing countries to solve the balance of payment difficulties of accelerated growth. Fifthly, some of the necessary services and institutions will be uneconomic if established on a national basis, and had best be provided for several countries together or on a regional basis. This applies specifically to more specialized training and research institutes and also to the essential advisory services for development planning.

For these reasons, regional machinery can play a most constructive role in development planning. The United Nations has the advantage of already possessing a framework for planning assistance on a regional basis, in the economic commissions it has created, three of which cover the major under-developed areas of the world. The commissions have established close links with the Governments of the region, with the specialized agencies, and, where appropriate, with their regional bodies. They enjoy the confidence of the Governments of the regions in which they are located. At the same time, they have the resources of a global organization behind them. Thus they offer a sound basis on which to build. The resources placed at the disposal of these commissions have in the past frequently been inadequate to enable them to realize their full potential in this field. The Secretary-General is reporting to the Economic and Social Council, simultaneously with the submission of this report, on steps already taken or contemplated to strengthen the work of the regional commissions.

The functions of the regional commissions have been described as follows in the Economic Commission for Africa (ECA): "To work out in concert economic targets and review them periodically in the light of the progress made; to study together the policies and methods needed to attain them; constantly to compare the results obtained and to seek out the reasons for mistakes and shortcomings; to expose oneself voluntarily to reciprocal influences, or even to restraints or obligations collectively worked out; and to do all this within the framework of a community which, however, varied in composition, is bound together by important historical characteristics and by the greatness of its aspirations—these are contemporary methods and disciplines which have

proved their worth elsewhere, and of which advantage must be taken here, in working methodically for economic progress".<sup>2</sup>

The Economic Commission for Latin America (ECLA) has been particularly active over a number of years in the development planning field. Its experience suggests that greater emphasis might be placed in the coming years on the technique of the advisory group, particularly in countries with only a rudimentary planning staff.

In other areas, depending on the extent to which planning and administrative machinery have already been established, and trained counterpart personnel may be found, other approaches may be desirable. It is the virtue of the regional commissions that they are able to tailor their working methods and technical activities to the needs and conditions of the countries in the regions they serve.

In Asia and the Far East, where some countries made an earlier start in the establishment of comprehensive development plans, United Nations action, through the Economic Commission for Asia and the Far East (ECAFE), in accordance with the requests received from Governments, has been directed more towards the programming of specific projects, particularly in the development of industry and natural resources. However, other activities of a planning advisory nature have also been undertaken. The Conference of Asian Planners has recently suggested the formation of planning advisory groups similar to those in Latin America.

In Africa, where a large number of States have only recently obtained independence, the assembling of the statistical data needed for planning, and the establishment of administrative machinery to implement the plans, require concentrated effort during the first years of the decade. As a result, activities have related particularly to country surveys, training, technical assistance and advisory statistical services. The preparation of over-all development plans that can actually be carried out will depend in large part on the successes achieved in this initial phase. Meanwhile, planning support will depend greatly on the application of pragmatic methods based on experience and whatever knowledge of resources and conditions is available. Other African countries are already in an advanced stage of planning.

A most important development in this entire scheme of things is the "institute" concept, which was formulated a little over a year ago. According to this, economic development institutes will be established in each region to provide assistance in economic development planning which the secretariats of the regional economic commissions cannot provide on a sufficiently large scale without stopping work on virtually all other items on their work programmes. The institutes, according to the recommendation of the General Assembly, are to be closely linked to their respective regional economic commissions and to the relevant work of the specialized agencies in the region. The co-operation and

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<sup>2</sup>From the opening statement by the Under-Secretary for Economic and Social Affairs to the recent session of ECA.

co-ordination built up over the years within the United Nations system, with reference to the regional economic commissions, should be extended to the new institutions so that they can enjoy the benefit of the accumulated experience of the specialized agencies and of the contributions the latter can make to development planning. To deal adequately with the interdependent problems of general and sectoral planning for economic and social development, the institutes must provide adequate staffing for both. This has already been a factor in the plans for the Latin American Institute approved by the Special Fund, and will similarly be a factor in establishing institutes for Africa and Asia. The next few years should see the formation and growth of these new institutes, which should add substantially to the success of the development decade. It is envisaged that these institutes might become the centres of training for development planning in their regions. This can only be accomplished, however, if the developed countries make both experts and funds available. It is hoped that this support will not be lacking.

#### D. ACTION ON THE COUNTRY LEVEL

The Resident Representative, who is also the director of Special Fund operations, has an important role to play as the co-ordinator of action at the national level by all the United Nations agencies participating in the Expanded Programme of Technical Assistance. He will not normally be a planning expert or economic adviser, and even where he may be so qualified his many other duties would not normally permit him to act in that capacity. Nevertheless, his role in intensified United Nations action will be highly important. It is his responsibility to call to the attention of a government which has not yet established development plans the importance of doing so, and to endeavour to obtain priority for assistance in this field, where appropriate, in the EPTA country programming process and in Special Fund projects. When joint planning teams are envisaged, the Resident Representative lends his efforts to ensure that all important economic sectors are adequately covered. While not responsible for technical matters he reminds the government of the need for sound projects and draws its attention to ways of utilizing the experience gained from completed or continuing projects.

The Resident Representative, to be effective in this work, must be familiar with the plans and priorities of the Government for his own work, and must maintain contacts with those responsible for non-United Nations activities complementary to United Nations programmes. He should also be able to suggest critical areas for attention which have been overlooked. Without being a planning adviser himself, he must be able to advise the government of where and how within the United Nations system planning support can best be obtained. Where planning advisers or advisory groups are at work in the country he must be familiar with their work and assist them with their difficulties. Added to

all this, he should be a man of wide experience who enjoys the confidence of the government.

These matters do not normally lend themselves to formal proposals. The role of the Resident Representative should develop gradually, the different conditions of the country, the wishes of the government and the nature of planning assistance required being determining factors. However, one specific area for action can be suggested.

Both recipient and donor countries have recognized the need for adequate information on the work and plans of the many assistance programmes operating in less developed countries. The conservation of time, effort and funds of the ministries of the recipient countries and of the aid missions requires that information be readily available on past and current projects and, to the extent possible, on future plans. To this end, the Economic and Social Council, in resolution 781 (XXX), asked the Secretary-General to report to the Council on the possibility of establishing and maintaining "a full and up-to-date record of specific technical and pre-investment assistance relating to the social and economic development of the under-developed countries, in easily accessible form." Co-ordination is not a matter requiring onerous operational procedures, but mainly a question of having the necessary information available for decision making. Neither donors nor recipients would knowingly duplicate projects adequately served by other aid programmes. Surveys and programming studies would be more effective if the results of past surveys and studies were more readily available.

The United Nations system could help all Governments to produce a central national register of development activities and assistance projects. Such a register would be available with the approval of the Government to all those giving assistance to the country concerned or contemplating such assistance. At present there is no systematic information available as to the many development activities undertaken by the various agencies and organizations in individual under-developed countries. Should it prove feasible to collect and collate it, such information could be of great value to Governments and organizations as well as to private entities and perhaps even to the Government of the country itself.

An information office for development activities could well be established under United Nations auspices on an individual country basis in the office of the Resident Representative, or on a regional basis in the regional commissions. The full co-operation of the Resident Representative who is already a repository of much of the needed data, and of the regional commissions, should be provided to Governments should they themselves seek to establish such information offices.

The task of developing a central clearing house of such information on a world basis would be formidable, perhaps too formidable for the present, although the development of information retrieval techniques combined with electronic computers puts it already within the

realm of the possible. Moreover, periodic summaries and analyses of national information might be made centrally available if such a central clearing house became desirable.

This "registry" of activities and various forms of aid could be gradually expanded. It would provide the factual basis for the organized consultations at the national level mentioned elsewhere in this chapter. Beyond this, it would be the basis for rationally intensified assistance to developing countries.

#### E. ASSISTANCE FOR IMPLEMENTING DEVELOPMENT PLANS

Mention is made above of the new consortium or consultative group approach to development financing and to the initiatives of the International Bank in this respect. There may be room for extending this approach to non-financial assistance, by organizing international consultation at the country level so as to make most effective use of the non-financial aid potentially available from the industrialized countries. For example, such consultations might be concerned with trade problems. Within the framework of liberalized and non-discriminatory trade policies toward developing countries suggested elsewhere in the report a consultative group might examine relevant export and import plans and elicit commitments for the necessary action by the countries concerned. The consultative approach might also provide a means of exploring the possibilities of supplementary aid programmes, increasing food aid, and aid in the form of other physical supplies. A recent example of this type of action by the United Nations itself is the Mekong project, which is described in some detail in annex II. The partnership or consultative approach to external assistance is based on the assumption that individual sources of aid will more readily play their part if they see others do their share. It is to be hoped that this approach may be further developed and made more systematic during the development decade.

### III. MOBILIZATION OF HUMAN RESOURCES

Emphasis on the mobilization of human resources as a pre-condition for achieving the aims of the development decade, and as a necessary area for intensified international action, does not perhaps need much general argumentation at this time. Educated and trained people are always the chief, and in the longer run the only, agents of development. The unutilized talents of their people constitute the chief present waste, and the chief future hope, of the developing countries. High priority must accordingly be given to establishing educational systems well adapted to the economic and social needs of the developing countries.

Increasing the range and quality of human skills, and the sense of involvement in a larger local and national purpose is, in the broadest sense, one of the main aims of development. Intensification of action to protect human rights and to eradicate discrimination is also a vital part of any sound programme of development.

It is important not to lose sight of these long-term objectives of development. But during the development decade national and international efforts must be concentrated on three major aspects of human resource development to which the highest priority must be attached:

- (i) Better utilization of the labour force by creating higher levels of productive employment;
- (ii) Improving the quality of the labour force by vocational education and training;
- (iii) Enlisting popular support for the tasks of national development, and the participation of broad social groups in them.

Particular attention must also be given to the problems and needs of children and young people. A key group are the newly educated primary school leavers—both the great hope and the great challenge of the developing countries.

Targets for the utilization and development of human resources must be set within the framework of national development plans. As a preliminary to the establishment of these national targets there is a clear need for manpower surveys, and for the establishment of machinery for manpower planning. In these matters countries may seek assistance from the United Nations system. The value of targets for utilizing and developing human resources would be greatly enhanced if the requisite manpower surveys could be carried out more expeditiously than is at present possible, and every effort should be made to develop the new techniques that are required.

The labour surpluses that are emerging in under-developed countries, even in many of those that are not densely populated, are raising difficult problems that cannot be solved simply by the adoption of appropriate vocational training plans, etc., important though these may be. There is an urgent need to devise practical policies that are economically sound and compatible with basic concepts of human freedom. Unfortunately there is relatively little in the experience of the economically advanced countries that is directly useful in this field.

The Governments and peoples of the advanced countries can potentially contribute much to the development decade through an expanding network of technical co-operation. Their contribution to the mobilization of the human resources of the developing countries, chiefly through assistance in the fields of education and technical and vocational training, is already significant and must be greatly expanded, particularly with regard to scientific and technological education, where the potential for the transfer and adaptation of knowledge far exceeds existing programmes.

If the human resources of the advanced countries are to be mobilized to the maximum extent during the development decade, new forms of technical co-operation will have to be devised, in addition to the expansion and adaptation of United Nations technical assistance programmes, discussed in a subsequent chapter of this report. In several of the advanced countries there are already signs of increasing interest in the development of an institutional framework for the mobilization of volunteers for service overseas and for the mobilization of the technical resources of private business for assistance to developing countries.

### **A. The younger generation**

Children and young people are the main potential agents and beneficiaries of all economic and social development programmes, the fruits of many of which will not be evident for at least a generation. In their early years, however, young people are also a major burden on current resources for development. Children are consumers, not producers, and the greater the scope of further educational facilities available for young people the longer their entry into productive employment will be delayed. In many developing countries where children are viewed as a supplementary source of income for the individual family, there may be strong pressures in favour of putting them to work as young as possible, but it is essential to postpone immediate utilization of youthful labour in favour of "investment" in its development if the full potential of the younger generation as a resource for development is to be realized.

This practical view of children and young people as an undeveloped—or under-developed—resource, requiring investment to develop its potentialities, does not conflict with the view that children have certain

basic human rights: the right first of all to survive, and also the right to improving standards of health and nutrition, the right to education and the right to a job that is both personally satisfying and useful to the community at large. In considering the needs and role of the younger generation during the development decade it is necessary to examine not only questions of education and training (which are discussed in subsequent sections of this chapter) but also the provision of health, nutrition and welfare services, and vocational guidance and training, for children and young people.

Many of the younger generation's needs are inseparable from those of the rest of the community, and do not require the establishment of special organizational machinery, provided that the need for the co-ordinated development of the whole range of services for children and young people is understood. Beyond a certain point it will do little good to devote more resources to health services if major nutritional problems remain unsolved: in turn, it may be impossible to advance very far in the field of nutrition without overcoming ignorance. And progress in any field of development will be limited unless children and young people are made to feel part of that progress and are adequately prepared to contribute to it.

Co-ordinated planning for the younger generation will tend to cut across the conventional sectors of governmental administration and development planning. Services for children and young people are usually the responsibility of different departments of the government. They are also often financed and administered in different ways: for example welfare services may be financed from local government revenues, and administered on a local basis while the educational system may be quite centralized in its finance and its administration.

What is required at the national level is not so much a separate development plan for the younger generation as a more widespread recognition of the fact that the rising generation plays a central part in the development process. In formulating their development plans, and in particular in establishing the institutional framework necessary for the implementation of these plans, Governments may consider devoting special attention to the needs of young people and their role in development.

### 1. YOUTH EMPLOYMENT PROBLEMS

One area of particular importance for young people (apart from education and training, discussed below) is the development of job opportunities for them, and the provision of vocational guidance and training. The most ambitious of the regional programmes for educational development during the development decade envisages that about 30 per cent of the children of secondary school age will in fact be receiving some form of secondary education in 1970. It is clear that children with a primary education but no further training will require

vocational guidance and assistance in finding productive employment, especially in rural areas. At the present time many rural school leavers who have received a few years' primary education are drifting to the big towns in search of the "better" jobs to which they feel their education entitles them, and because existing jobs and the nature of life in the villages do not satisfy them. This drift is creating serious social problems, not only because country youth find it difficult to adjust to the ways of urban living, but also because opportunities for employment are equally scarce in many urban areas and housing and urban facilities are lacking.

In connexion with the employment of young people, two main areas for action may be identified:

(i) It is essential to find ways of encouraging rural school leavers to take up work in rural areas rather than migrating to the towns, while at the same time providing the best possible education so as to widen their employment opportunities. There may be some possibility of expanding rural industries and other occupations in some countries, but basically the problem is to increase the attractions of farming as an occupation. This requires re-orientation of school curricula towards developing the basic skills and resourcefulness of the pupil. It also requires the establishment of further facilities for agricultural training and reinforcement of rural youth extension work; the development of new farming methods and crops making land available to young farmers on reasonable terms, possibly through co-operatives; and the development of crop marketing facilities, both for export crops and for horticultural produce, etc., for which there is a market in urban areas. The main object of any measures undertaken should be to turn farming into a way of life materially and otherwise attractive to the young people in rural areas.

(ii) In urban areas the chief problems are the lack of suitable employment opportunities for young people in industry and the need to protect young people from some of the abuses of industrial employment and urban life, which may be a matter of great social and humanitarian importance. In industrial areas the problem of finding suitable jobs for young people is often compounded by the fact that legislation intended to protect them from exploitation (i.e., regarding hours of work, wage rates, etc.) may result in driving them out of the bigger, well organized industrial plants, where working conditions are usually superior, into backstreet "sweat shops" where conditions of employment are frequently very bad. It thus seems advisable to place increasing emphasis on the positive task of creating new job opportunities for school leavers and young people in urban areas rather than confining efforts to protecting them from abuses. To do this will require close co-operation at the local level between schools, vocational training institutions and employers, and may necessitate the establishment of special co-ordinating services.

## 2. AREAS FOR INTENSIFIED ACTION BY THE UNITED NATIONS SYSTEM

The problems of children and young people are the concern of a number of different branches of the United Nations family, and indeed the division of responsibility is as striking on the international as on the national scale. The agencies and departments involved include UNICEF, working on behalf of all children, four specialized agencies concerned with sectors of importance for the development of children and young people, namely UNESCO, WHO, ILO and FAO, and the United Nations Bureau of Social Affairs, which is concerned *inter alia* with the welfare and social services provided for children and young people.

(i) Within the last two years the foundations of a co-operative framework for helping countries to assess the needs of their children and young people and to plan programmes for them, have been established. The Executive Board of UNICEF has indicated its readiness to help countries, in co-operation with the specialized agencies, "to survey the needs of their children and to plan programmes, within the framework of their economic and social development plans designed to meet children's needs considered to be of high priority and for which effective action is possible".<sup>1</sup> The special needs and potential contribution of children and young people must be taken into account at the very earliest stages of development planning, and it is at this stage that action by the United Nations system, including technical co-operation and advisory services and the provision of material assistance, may be expected to make its maximum impact.

(ii) Countries may request assistance from the United Nations system in connexion with the establishment of facilities for the vocational guidance and training of youth. The United Nations organization is concerned with essential welfare services for children and youth, and with the contribution of youth to community development programmes, and plans to intensify its assistance in this field. The ILO, in co-operation with UNICEF, is developing proposals for Youth Vocational Centres, which should form part of a broader programme of assistance and protection for young people entering employment. Agricultural extension can play an important role in the education and practical training of rural youth, and especially in developing vocational interests. The organization of rural youth associations has proved to be most useful for these purposes. Extension services in developing countries could be reinforced to a point in which this task can be properly accomplished on a nation-wide basis.

### B. Education

Education is essential for producing the necessary human talent and qualified manpower for development. It should not, however, be

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<sup>1</sup> *Official Records of the Economic and Social Council, Thirty-second Session, Supplement No. 13B, para. 56 (1).*

overlooked that in developing countries education is usually the largest single item of public expenditure, and it is both an economic and social sector of the economy in the same sense as those dealt with in chapter IV.

### 1. THE DEVELOPMENT DECADE TARGETS

UNESCO, in co-operation with other United Nations agencies and with the Regional Economic Commissions, has already set the stage of a decade of intensified action for the development of education, in the context of and as a contribution to over-all economic and social development. Educational needs have been studied at the national and regional levels, and a framework of decisions regarding the levels of educational development to be achieved by 1970-1971 has been established.

*In Africa:* 70 per cent of the children of age group 6-12 will be in primary schools (present level 40 per cent); 15 per cent of the appropriate age group in secondary schools (3 per cent); and 0.4 per cent of the appropriate age group in universities (0.2 per cent);

*In Asia:* 50 per cent of children of primary school age will be in primary schools. On the basis of incomplete information on national plans it is further estimated that 50 per cent of primary school graduates will go to secondary schools, plus a further 20 per cent to trade and agricultural schools. In the area of higher education the present percentage of 2 per cent is expected to move towards a target of 3 per cent of the appropriate age group being enrolled in higher education institutions;

*In Latin America:* All children of primary school age will be in 6-year primary schools (implying an increase in the primary school population from 26 million children in 1960 to 45 million children in 1970); 30 per cent at the appropriate age group in second level schools; and 4 per cent of the appropriate age group in universities.

In addition to these targets for the main levels of education, regional plans call for substantial development of adult education facilities and training programmes. Periodic conferences of ministers of education will be held to review progress and consider future developments. The attainment of these targets will require an annual expenditure of 4 per cent of the gross national product by the end of the decade, to which the countries of the regions have committed themselves, and, in addition, will require large amounts of external assistance which have been calculated with some precision for the decade. It is expected that financial aid, both bilateral and international, will be devoted to educational development to a growing extent during the decade. In particular, the IDA will expand its activities into this field.

FAO started a series of regional studies on agricultural education facilities and needs beginning with Latin America in 1955. Later on

studies were made for Asia and the Far East, and for the Near-East. These studies were being followed up in association with UNESCO by meetings of deans of faculties of agriculture and directors-general of ministries of agriculture in order to revise present training programmes and discuss necessary improvements in order to meet countries' needs for trained personnel.

## 2. EDUCATIONAL PLANNING

The countries of Africa, Asia and Latin America, during the next three years, are committed each to translating the decade targets into national educational plans integrated in over-all development programmes. In establishing such plans, technical assistance from UNESCO and the regional economic commissions is a priority request from each region. In meeting this enhanced demand for planning assistance—totalling over 500 experts for the three regions—steps are being taken to increase the supply of these key personnel during the development decade.

An International Institute for Educational Planning at Paris is being proposed to train high level educational personnel and economists along the inter-disciplinary lines that planning requires. Regional or sectoral institutes for rapidly increasing the number of trained planning specialists from the region are being established in Delhi, Beirut, and as parts of the economic development institutes in Santiago, Bangkok and Dakar.

Since UNESCO is promoting the policy of relating education to development needs, development economists are included in the expert missions it sends to advise countries on framing their educational plans, and economic courses on the relation between education and development are given in the Educational Planning Institutes. UNESCO's Analysis Unit on the role of educational science and information in economic development, and its statistical services, will work closely with the economic agencies of the United Nations system, stimulating research and collecting data on the investment needed in various types of education at different development levels, assessing the future demand and supply in respect of different types of education, and conducting analyses of the interrelation between educational science and economic and social development. With the help of outside scientific institutions new methods are being sought of assessing educational needs and potentialities. This work links both with the shorter-term manpower survey work of the ILO (UNESCO being concerned with the educational component of the different skills likely to be in demand) and with the work of the United Nations regional commissions and of FAO in the longer-term forecasting of the changes in production and technology and the demand for qualified manpower likely to occur over the next ten to fifteen years—the time period needed for target setting in educational planning.

A special programme for agricultural education and training in Africa was approved by the eleventh conference of the Governing Body of FAO. The main objective of this programme, which is now being implemented, is to help African countries to develop their agricultural education and training, taking into consideration the countries' possibilities, their present and foreseeable needs, and the best possible use that can be made of available local and outside help. Regional and sub-regional collaboration among countries for specific purposes will also be considered. FAO proposes to continue and intensify such efforts during the development decade in close co-operation with the ILO and UNESCO.

### 3. PRIMARY AND GENERAL SECONDARY EDUCATION

Expenditure on primary and secondary education has mainly to be derived from national resources since the greater part of the cost of education is represented by teachers' salaries. In terms of real as well as financial resources, special efforts are required to increase the supply of teachers. This will take the form of training instructors who will in turn train the teachers at the primary level. At the secondary level, the main need is a rapid expansion of facilities for teacher training. The Special Fund is already assisting in the establishment of a number of teacher training colleges. There is considerable scope for external aid in the form of foreign experts and foreign exchange needs arising from the rapid expansion of educational programmes, particularly at the secondary level. Also where countries face gaps between what is fiscally possible to them and what is physically possible in terms of their resources of teachers, buildings, etc., a strong case can be made for foreign grants or loans for educational programmes.

During the development decade UNESCO proposes to continue and expand its activities in connexion with the training of primary and secondary school teachers as follows:

(i) The establishment of national colleges for the training of secondary school teachers to meet the priority goals of expansion of secondary education, with special emphasis on the training of science and language teachers;

(ii) An intensified programme for training instructors in teacher-training institutions for primary school teachers, to match the goal of universal primary education by 1980;

(iii) Research into the reform of teaching methods in primary schools and the establishment of pilot projects in the use of new techniques;

(iv) Attention will also be given to the need to revise secondary school curricula in the light of national conditions and economic needs.

#### 4. TECHNICAL AND VOCATIONAL EDUCATION

In this sphere, major efforts during the development decade will be to help Member States to develop this type of education at the secondary level, where the supply of teachers constitutes the most acute need, as for general second level education. Action in this field will be guided by the International Recommendation which is being submitted to the General Conference of UNESCO at its 12th session (November-December 1962), the provisions of which have been closely co-ordinated with those of the ILO International Recommendation on vocational training adopted by the International Labour Conference in 1962.

Another main task will consist in continuing to build up, with assistance from the Special Fund, polytechnical institutes and engineering schools in order to provide the developing countries with the senior technical personnel and production engineers necessary for their economic development. These activities involve the provision of the necessary supporting services.

#### 5. ADULT EDUCATION—ERADICATION OF ILLITERACY

Programmes for the eradication of illiteracy will involve both action in favour of universal primary education, which has already been discussed, and remedial education for adults and young people who have had no access, or inadequate access, to primary schools. A mass attack on ignorance is an urgent necessity if people everywhere are to contribute to national economic and social development programmes to the fullest possible extent of their capacities. They must not only learn how to read and write, but must be taught to make effective use of these skills.

A number of countries are establishing national programmes for the eradication of illiteracy, and during the development decade stress will be laid on stimulating and assisting such national programmes. Areas of activity envisaged by UNESCO in support of national programmes are:

(i) Planning and administration. Special attention is needed during the decade for planning literacy and adult education programmes within the framework of community development and other national development plans and establishment of administrative machinery to conduct these programmes which is weak or non-existing in many countries;

(ii) The training of staff. At regional and national levels, assistance in training could be provided, and training projects established in certain specialized fields;

(iii) Studies and research, including research into teaching methods, the use of new media (their testing in pilot projects), etc.;

(iv) The use of mass media for educational purposes and the large scale production of reading materials;

(v) New and additional measures of financing educational programmes from voluntary and local sources must be developed during the decade.

## 6. HIGHER EDUCATION AND THE SUPPLY OF HIGHLY QUALIFIED PERSONNEL

In any plan for the development of higher education, due account of the following fundamental points will be taken:

(i) Higher education is an integral part of the educational system. The University is not only the centre of learning and a nursery of the higher skills, but is also a necessary means of improving the quality of primary and secondary schools. The quality of the leadership and scientific standards prevailing in a country are largely determined by its universities.

(ii) Increasing emphasis may therefore be placed on the principle that those who have the ability and aptitude to pursue higher education should have an equal opportunity of access to it.

(iii) Aid will be extended by UNESCO to develop and improve the standards of the universities and centres of higher learning and research (in particular in some of the natural sciences and the social sciences) so as to provide the basis for the country's full participation in the benefits of modern technology in industry, agriculture and administration.

(iv) Ancillary institutions of higher learning will be linked to universities in order to be sure that adequate standards and aims are developed.

(v) UNESCO will be engaged on a long-term programme to aid Member States in improving the supply of high level manpower, both technical and non-technical (managerial and administrative). The process of economic growth requires a much greater rate of increase in scientific and technical personnel than in the general labour force. A long-range programme is being designed to supply higher level manpower by improving education in science and technology, in particular by: gathering, analysing and disseminating information on modern curricula and methods of teaching science and technology, and on the facilities required for this purpose; promoting modern teaching by new methods, inexpensive equipment and other aids; facilitating the rapid improvement of the supply of teachers, technologists and professors of natural and social sciences through special courses, fellowship programmes and international conferences.

(vi) The training of specialists in the prospecting and scientific mapping of natural resources will also be promoted as well as that of oceanographers (in connexion with the marine sciences programme).

While the main immediate requirement in many developing countries, particularly in Africa, may be for basic training at the technician level and graduate training in well-established technologies, the importance of preparing a cadre of specialists conversant with the latest developments in science and technology should not be overlooked. These small cadres, trained for instance in advanced technologies such as the applications of nuclear science, will provide a basis for the further scientific development of the countries concerned and a vital element in activating scientific progress and preparing the minds of the next generation of students.

In this connexion the nuclear science centres already being established may play a catalytic role by providing the nuclei around which other scientific institutions can be built and by creating the scientific atmosphere which is vital for sustained growth.

### C. Training

Intensified training is inherent in all the actions proposed for the development decade elsewhere in this report. Moreover, training must be seen in relation to education on the one hand, and employment opportunities on the other. All the same, its crucial part in the success of the development decade warrants special consideration.

The support of the more developed countries and their organizations is needed to supply the specialists required to train, and temporarily supplement, the manpower of newly developing countries; their training facilities are equally needed by the international programmes on behalf of the under-developed countries. As a vital contribution to the success of the development decade, the more developed countries, acting individually or through their own organizations or by international action, might agree to train specialists in excess of their own requirements for service in developing countries, to create the necessary services and give the necessary inducements in terms of pay, tenure, maintenance of seniority, promotion prospects, etc., and to place at least a part of these services and men at the disposal of the United Nations programmes.

It may well be that the supply of trained people and training facilities is not the only area in which action by the developed countries will be needed. Financial assistance to developing countries, to help meet the heavy cost of the rapid expansion of their educational and training systems, may also be necessary. But the availability of trained people is basic. One of the priority tasks for the United Nations system during the development decade must be to secure much larger numbers of people at various levels to carry out the various training programmes which are required and must be established in the developing countries.

Within the framework of generally intensified training activities by the United Nations system, some areas can be identified to which emphasis is expected to shift. Some of these shifts were already identified two years ago by the *Five-Year Perspective, 1960-1964*,<sup>2</sup> prepared by the Committee on Programme Appraisals set up by the Economic and Social Council:

(i) Training should increasingly take place within the developing countries themselves. Individual fellowships for study abroad should be limited to high-level specialists or to students who will acquire new technological knowledge in fields where training in the developing countries would be difficult or uneconomic, even on a regional basis. Special care should be taken that training abroad does not lead to the ultimate loss of the specialist to his country. The drain of specialists from the developing countries already constitutes a serious problem, and may impede the objectives of the development decade.

(ii) Wherever appropriate, training institutions should be created on a national or regional basis. Where larger number have to be trained continuously over a considerable period, *ad hoc* training courses, seminars, etc., are not an adequate answer to the problem. Institutions can be more economical as well as more effective in developing the right training methods and preserving training experience. The United Nations Special Fund is giving a valuable opportunity for the United Nations system to assist effectively in this regard.

(iii) Since the funds available are not, and are not likely to be, commensurate with needs, training support by the United Nations must be concentrated where the greatest leverage effect can be obtained. The ILO, for instance, gives priority to training projects of the self-propagating type: it helps countries, first of all, to improve the qualifications of their vocational training instructors and of lower and middle management personnel in industry, large or small, and to develop the abilities of top management.

(iv) There is also a need for training middle-level and auxiliary personnel. The shortage of auxiliary personnel in developing countries is often as acute as the shortage of professional staff, or even more so. Their shortage reduces the efficiency of those specialists who are available, specifically in such fields as health and agricultural development.

(v) The preparation of systematic training programmes derived from general development plans, based on manpower surveys and quantitative projections of trained manpower requirements, is increasingly emphasized. Assistance with such surveys and projections for individual countries, as well as the development of techniques and methodology for them, will be intensified during the coming years by the various United Nations organizations in their respective areas of competence.

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<sup>2</sup> United Nations publication, Sales No.: 60.IV.14.

(vi) The requests for technical assistance received by the United Nations show also certain fields which have been relatively neglected so far. Training of young diplomats, for which a centre is being established in Geneva, and training activities in legal matters, have recently emerged as typical examples of fields which the United Nations may usefully enter, especially in view of the needs of the newly independent countries. The International Bank expects to expand the programme of its Economic Development Institute to make possible a wider variety of special courses in addition to the regular course for senior officials engaged in development work, and the IMF is studying ways of enlarging and intensifying programmes for training officials of member countries in the Fund's sphere of activities. The GATT secretariat is expanding its in-service training programme for qualified government officers from less-developed countries who receive for this purpose fellowships from United Nations Technical Assistance. Further, beginning in 1962, the GATT, in collaboration with the ECA and the United Nations Technical Assistance Administration, will run short courses in Africa on commercial policy. Finally, the GATT has recently offered to provide newly-independent countries with technical consultative services so as to assist these countries in the solution of their commercial policy problems.

Another proposal deserving separate mention is presently under consideration by the ILO. In the summer of 1961 the Italian Government asked the ILO to study the possibility of using buildings erected for the Turin International Labour Exhibition, suitably converted, for the establishment of an international centre for advanced technical and trade training. The main purpose of this centre would be to assist developing countries to improve the skills of persons working at all levels in their industrial undertakings, large and small, who are considered suitable for more advanced training than could be given in their own country. According to initial estimates, the Turin site could accommodate something like 2,000 fellows each year from countries in the course of industrialization, who would attend advanced theoretical and practical training courses ranging in length from one month to a year.

The development of human resources calls for appropriate institutions and machinery to determine and implement systematic policies regarding such matters as the level and structure of employment and the provision of balanced vocational education and related training facilities. Such machinery should constitute an integral part of the over-all economic development planning or policy-making machinery, and would enlist the co-operation of broad social groups, e.g. the trade union movement, employers' organizations and industrial relations machinery generally. Arrangements are also necessary for periodical appraisal of the results achieved in the above-mentioned fields and for reviewing policies and institutions accordingly. The ILO attaches particular importance to these considerations and intends to make

sustained efforts to assist in the establishment of such institutions and in training personnel for them as one of its major contributions to economic and social development.

### D. Community development

In most of the developing countries only a small fraction of the population participates actively in national life. The vast majority, living mainly in rural areas, remains uninvolved in national development efforts. Community development programmes, which depend on the mobilization of popular support and the enlistment of voluntary labour for local projects, provide a direct means, along with the spread of education and the development of mass media of communication, of converting the apathy, suspicion or hostility of the masses into a constructive national force.

Community development is a method and an approach which is applicable to the problems of rural development as a whole, including the key element of land reform. Land reform, in this context, is much more than changes in land tenure or redistribution of land ownership; it is in the widest sense of the term synonymous with agrarian institutional reform. Measures of land reform, to be successful, must be followed by technical guidance and training of the farming population and other measures to increase agricultural production, including the provision of credit and marketing facilities, possibly on a co-operative basis. These follow-up activities, like many other programmes for rural improvement, while being functions of specific disciplines, can be carried out more effectively and with promise of sustained progress under the favourable conditions created by community development.

The following proposals for action in the field of community development in the ensuing decade are suggested:

(i) The strengthening and extension of community development programmes to other countries, particularly the newly independent countries of Africa;

(ii) More emphasis on the economic aspects of community development;

(iii) Closer identification of community development with local government.

*(i) The strengthening and extension of community development programmes to other countries*

Information available to the United Nations indicates that at the beginning of the 1950's there were only seven countries in which community development had become a full-fledged programme on a national scale; by the end of the decade, there were more than thirty such

countries. Another thirty countries had the rudiments of community development pilot projects, without, however, in all cases using that label.

The growth of interest in community development during the last decade suggests that it should be possible to set as a target the extension of community development programmes to many more of the less developed countries of the world by the end of the current decade of development. To the newly independent countries, such programmes appear to offer a good means of bridging the gap between the diverse and urgent needs of development and the limited resources available. In older countries, community development may provide the answer to an important and baffling obstacle to development—the failure to enlist the support of people.

As a further goal for the development decade, the extension of community development to urban areas is suggested. The application of urban community development principles, which by the end of the last decade had already begun to attract wide attention, would be particularly useful in counteracting social disruption in rapidly industrializing areas and in the solution of problems of urban fringe settlements.

The extension of community development programmes on the scale proposed will require renewed emphasis on training of personnel. It will also require a very considerable extension of international technical assistance. Here again the trend of the past decade can provide a guide to the possibilities of the future; while in 1951 only one community development expert was provided under the United Nations technical assistance programme, by the end of that decade there were as many as thirty-nine experts assisting twenty-eight countries throughout the world. As a minimum goal of the development decade, it should be possible therefore to envisage that by the end of the decade assistance in planning and organizing community development programmes could be made available to countries not already supplied with such help, and that assistance could be given on an increasing scale in training the necessary cadres of workers.

(ii) *Emphasis on the economic aspects of community development*

In addition to the quantitative expansion referred to above, community development in the decade of development should also be more specifically directed to over-all economic development. In this connexion, the following areas deserve special emphasis:

(a) Inclusion of community development in over-all social and economic development planning. At the regional level, rural and community development planning should be included in the research and training activities of the regional development institutes which are in the process of being created in the various regions.

(b) The measurement and reduction of rural under-employment, including the use of unemployed and underemployed manpower in rural areas for the construction of roads, wells, canals, etc.

(c) Integration of community development in land reform policy with particular reference to the development of new village communities or the strengthening of existing ones.

(d) Encouragement and practical assistance in the formation of co-operatives both as an outcome of the community development process and as a means of furthering the social and economic development of the community.

(iii) *Identification of community development with local government*

The question of the relationship of community development programmes to local government administration is discussed under the heading of Public administration and local government (see chapter VII). Special attention needs to be given also to the broader question of possible methods of administering rural development itself, and in particular, the alternative ways of linking the activities of local government, co-operative organizations, and other voluntary bodies with those of the community development at the rural local level.

## IV. SECTORAL DEVELOPMENT

### A. Food and agriculture in the development decade

#### 1. BASIC PROBLEM OF THE NEXT DECADE: HUNGER

One of the basic problems facing the world, in particular the greater parts of Asia, Africa and Latin America, over the next decade will still be hunger. According to a recent authoritative estimate, about one-sixth of the world's population—roughly 500 million people—today suffer from a lack of sufficient calories, and twice that number suffer from malnutrition or diet deficiencies in terms of vitamins, minerals and proteins.

This situation exists despite the considerable technological progress made over the past decade in the field of food and agriculture and in other related fields. The main reason is that the benefits of technological progress have so far been confined largely to the relatively few advanced countries of Europe, North America, and Oceania, and to a mere handful of countries in Latin America, Asia and Africa. In most of the under-developed countries, progress in food and agricultural production techniques has been slow, or has been largely offset by considerable increases in population. This is indicated by the fact that current nutritional levels in some of the major geographical, and admittedly under-developed, regions still remain at, or very little above, the pre-war levels. In Asia and the Far East, which is the most populous geographical region, the *per caput* calorie supplies and animal proteins (2,070 and 8 g per day) have not quite regained their pre-war levels of 2,170 and 8 g. In the other three regions, the Near East, Africa and Latin America, the calorie supplies *per caput* per day (2,470, 2,360 and 2,470 respectively) are above the pre-war levels, but the *per caput* animal protein supplies per day (14, 11 and 25 g) are still below the pre-war levels (15, 15 and 30 g). For the world as a whole, however, the present *per caput* animal protein supplies (20 g) have exceeded the pre-war level (18 g), owing to a considerable increase in the consumption of foods of animal origin in Europe (from 27 to 36 g) and North America (from 50 to 66 g). The current supply of the basic nutritional elements, in particular animal proteins, varies widely between regions, and even more widely within regions and countries.

*Over the last decade* in most of the developing countries population increased at the relatively high rate of over 2 per cent per annum, while the annual expansion of total food supplies was of the order of 2.5 to 3 per cent, thus *per caput* supplies increased by about

1 per cent per annum. Such a continued high rate of population growth is bound to perpetuate the state of hunger over the next and subsequent decades unless, side by side with an increase in the gross national product of 5 per cent aimed at for the development decade, food supplies are substantially increased so as to leave a fair margin over population growth for improving the present levels of diet.

*Over the next decade*, that is by 1970, population in the four major under-developed regions will probably continue to increase at or even above the most recent rate, that is, by about 2.5 per cent per annum in the Far East, Near East and Africa, and by nearly 3 per cent in Latin America. In terms of total population, the increase will be a little less than 30 per cent in the Far East, Near East and Africa, and more than 30 per cent in Latin America. At the end of the century, population is expected to have doubled in Africa, to be two and a half times its present size in the Far East and the Near East, and to treble in Latin America. World population is expected to rather more than double by the end of this century.

Meeting the food requirements of such an increased population, and at the same time providing for moderately improved nutrition, will be a major task during the development decade, as also in subsequent decades. Since nutritional improvement will depend on whether the needed food supplies can be made available and whether *per caput* incomes can be increased, the desirable level of improvement can only be achieved in stages, especially in regions where a substantial improvement is needed. The nutritional levels, in terms of *per caput* calories and animal proteins in grammes, to be attained *at the end of the present decade* in the four major regions are: Far East 2,300 and 10 g. Near East 2,740 and 20 g, Africa 2,420 and 15 g, and Latin America 2,400 and 25 g.

To meet even these low nutritional targets, the required over-all increase in food supplies for the decade ranges from 45 per cent to 52 per cent in the various regions, which means an annual increase of between 3.8 per cent and 4.3 per cent.

In terms of *per caput* food supplies, the rate of annual increase will have to be between 1.5 per cent and 2.0 per cent (1.8 per cent in the Far East; 1.6 per cent in the Near East; 1.4 per cent in Latin America and 1.3 per cent in Africa). It is estimated that the average annual rate of increase of *per caput* food supplies in the Far East has been about 1 per cent over the past decade, so that this rate must be almost doubled over the next decade to achieve the nutritional targets.

The requisite increase in food and agricultural production will necessitate the adoption of modern agricultural practices on an extensive scale. For example, a recent FAO study indicates that the requirements of chemical fertilizers in the four under-developed regions, Africa, Asia, Near East and Latin America, will approximate 15 million

tons in 1970. This is eight times the quantity currently used in these regions. In most under-developed countries, less than 20 per cent of the food crops are produced from improved seed, whereas by the end of the development decade at least one half of the food crops will have to be grown from improved seed. Similarly, the increase in animal products will require a 50 per cent increase in milk production per cow, the doubling of poultry production, increased slaughtering and better processing and marketing of meat, and a 50 to 75 per cent increase in the catch of fish.

## 2. FAO FREEDOM-FROM-HUNGER CAMPAIGN AND THE WORLD FOOD PROGRAMME

The Freedom-from-Hunger Campaign is an intensification of the whole of FAO's activities for increasing food production, improving nutrition and raising both incomes and standards of living of the rural population, and is the summation of the whole of FAO's work. It will therefore be FAO's main contribution to the joint efforts of the United Nations system for the development decade.

The main objectives of the campaign so far have been to arouse public consciousness about the prevalence of hunger and the need for speeding up over-all economic and agricultural developments; to explain the possibilities and problems of such development; and to stress the need for more co-operative action in and between countries, culminating in the World Food Congress to be held in 1963. As part of the activities of the development decade, the Freedom-from-Hunger Campaign will assume even wider significance. If additional resources are forthcoming as people all over the world begin to realize the need for speeding up economic development in the less developed countries, FAO will be able to help by fixing nutritional goals in countries and for different areas and groups within each developing country, and by deciding what production practices and supplies will be needed if the targets are to be reached within the next decade.

Progress in the use of food aid for promoting economic and social development was made when the World Food Programme received final approval by the FAO Council and the Economic and Social Council in April 1962. This is an experimental programme under which about \$100 million in food and cash are to be expended through United Nations channels over a three-year period. The Economic and Social Council agreed that this programme should be initiated with the minimum delay and invited governments to take early steps to prepare for the Pledging Conference and, in determining their pledges, to bear in mind the goal of \$100 million in commodities, services and money.

To the extent that the growing demand for food, in excess of expanding agricultural production, can be met by using surpluses, economic progress in the under-developed countries can be safeguarded.

At the same time, since part of their growing demand can be covered by commercial imports, the markets for exporting countries will be broadened, thus aiding world economy as a whole.

### 3. MAJOR TASKS DURING THE DEVELOPMENT DECADE

The problem of hunger could be solved by applying modern technology to agriculture everywhere and by bringing new arable land under plough. This solution is simple in theory, but very difficult and time-consuming in practice, and requires many other types of programmes and measures in the economic and social fields.

In the first place, food and agricultural commodities must be produced in larger quantities by the extensive use of the scientific methods and modern technology that have been so effective in the more developed countries. This will require the rapid adaptation of such methods to the varied ecological and cultural conditions of the less developed countries. It will also call for:

(a) Physical requisites such as fertilizers, seeds, improved farming implements and pesticides;

(b) Production incentives such as fair and stable prices, land reform, credit and marketing facilities; and

(c) Basic institutions and services such as agricultural administration, research and extension, education and training.

Secondly, increased agricultural production alone is no panacea for the ills which afflict the great majority of countries in the world today. What has already been produced, and the larger crops that will be produced in the future, need to be stored, processed and distributed better, both within countries and between countries. This raises the question of internal distribution and reasonable prices for various agricultural products within each country, but there are also problems of international trade, particularly the relationship between prices of agricultural products entering the regional and the world markets and prices of non-agricultural or industrial goods. The problem of agricultural surpluses also arises in this connexion.

The United Nations system is already playing a significant part in solving many of these problems. But with the need for, and the possibility of much larger production of food and agricultural commodities over the next decade, it will obviously have to do even more to secure more efficient and orderly arrangements for the internal and international distribution and disposal of food and agricultural products.

Thirdly, hunger is a problem which extends far beyond the field of food and agriculture alone. It can be really and effectively eliminated only by abolishing poverty. To make possible the actual intake of the necessary improvements in food supplies (roughly 1.5 to 2 per cent per person per annum) over the next decade, the aggregate annual

income in the under-developed regions will have to increase approximately at the rate of 5 per cent, suggested by the General Assembly as a minimum target. Agricultural development has thus to be achieved as an integral part of general economic development; hence the importance of comprehensive national development plans.

Fourthly, while agricultural development must be viewed as a part of general economic development, it is also important that agriculture is given adequate importance in any national development plan. This has not always been done, and the plans have suffered accordingly. Any deficiency in agricultural production will affect the overall rate of development and result in inflation and high food prices, with all their undesirable consequences.

Fifthly, there is a need to expand employment opportunities in rural areas. This has already been emphasized in Chapter III, as has also the need to make farm life more attractive, in order to counteract the drift to the towns.

From these considerations it follows that, in development planning and the preparation of rational development plans, an adequate allocation of investment funds must be made for agricultural development. To achieve the target of a minimum growth rate of 5 per cent per annum at the end of the development decade, the rate of growth in agriculture in the developing countries should be of the order of 4 to 4.5 per cent.

#### 4. MAIN AREAS OF FAO'S ACTIVITIES DURING THE DECADE

The activities which will receive special attention from FAO over the next decade are indicated in this section, without any order of priority, partly because so many of these measures are interrelated:

(i) Assistance to countries, at their request, in developing their nutritional goals and setting targets for various food groups and raw materials to be required over the next decade.

(ii) Developing programmes of nutrition education to promote an understanding of the basic principles of nutrition and to determine the acceptability of new foods as well as to advise on their production and use.

(iii) Improvement of the techniques of production in agriculture, animal husbandry and fisheries.

(iv) Improving the storage, processing and marketing of foods.

(v) Dealing with problems of national, regional and world distribution of food and agricultural products, and the prices of such products relative to those of industrial goods.

(vi) More accurate projections of world demands for various agricultural products along the lines of the recent study on *Agricultural*

*Commodities—Projections for 1970*<sup>1</sup> and collaboration with countries and with other multilateral and bilateral agencies in fixing and stabilizing international prices for such products.

(vii) A greater emphasis on assistance to countries in introducing the various agrarian reforms necessary to promote greater agricultural production.

(viii) Greater attention, in co-operation with OPEX, to streamlining and reorganizing national agricultural administrative systems so as to help them discharge their new and complex responsibilities in connexion with agricultural development programmes.

(ix) Assistance to countries in evaluating the work of existing credit co-operatives and community development organizations and in suggesting, where necessary, ways and means to make them more effective.

(x) Paying increased attention to essential services such as education, training, research and extension. FAO will intensify its education programme in Africa and in other regions where such a programme is necessary, and will give greater attention to the training of technicians in agriculture, including forestry, fisheries, veterinary services, nutrition and home economics, and agricultural economics and planning, so that the supply of such technicians can keep pace with the growing demand for them.

(xi) Development of agriculture as an integral part of national and regional economic planning. In this connexion FAO will co-operate with other international agencies in surveys of present and potential resources in the interests of long-term planning by individual countries or in homogenous areas covering more than one country.

(xii) Endeavouring to ensure that agriculture is given its proper place in national development plans so that it can both meet the projected increases in food and agricultural products at the end of the plan period, and produce surpluses for export, thereby assisting capital formation.

(xiii) Co-operation with other international and bilateral agencies, as well as with member countries, in achieving the objective of a minimum annual growth rate of aggregate national income of 5 per cent at the end of the decade, while being concerned primarily with the required rate of development in food and agriculture.

(xiv) Keeping an inventory of the requirements and supply of capital assistance needed for carrying out the agricultural development plans of the countries, and therefore, keeping a close watch on world developments leading to an increase of such capital assistance. As the flow of total aid funds to developing countries increases over the next decade, FAO will be interested in seeing that agriculture in these countries gets an appropriate share.

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<sup>1</sup>FAO Commodity Review, 1962, Special Supplement: *Agricultural Commodities—Projections for 1970*, FAO, Rome, April 1962.

(xv) FAO looks forward to a further expansion of technical assistance and pre-investment operations over the next decade under the Expanded Programme of Technical Assistance and the Special Fund as well as under the new World Food Programme. It also expects a closer relation to be established between itself and certain other United Nations agencies on the one hand, and various multilateral and bilateral agencies—including the International Bank and International Development Association—on the other hand, in the formulation and supervision of capital aid projects in agriculture.

## **B. Natural resources in the development decade**

### **1. FORECAST OF TRENDS**

It is very probable that the development decade will see a large increase in requests by countries for operational projects financed by EPTA, the Special Fund, and similar programmes. To meet these requests, research and all the other activities which support the work in the field will have to be strengthened if the knowledge and experience acquired are to be systematized and disseminated more widely. Moreover, the United Nations Conference on Science and Technology for the Benefit of Less Developed Areas, which is to be held in 1963, will probably suggest new directions for research and operational activities.

The specific proposals made in the following paragraphs include the building up of cartographic services and the preparation of adequate maps; intensified country surveys of water needs and resources for irrigation, drinking, hydro-power, navigation and other purposes; preparation of the groundwork for agreement on the integrated development of international river basins; intensified work on rapid mineral exploration based on photogeological mapping, airborne geophysical surveys and subsequent concentrated ground surveys; the promotion of co-operation between neighbouring countries in mineral development; systematic surveys of energy needs and resources; and the development of small power units, using local energy resources, to introduce electrification in the large neglected rural areas where there is no electric power.

### **2. SURVEYING AND MAPPING**

Requests for United Nations assistance in surveying and mapping are expected to grow during the decade, and they will probably be increasingly concerned with the production of topical geological and soil maps and cadastral surveys as a basis for land reform and the modernization of land administration.

This work will no doubt often be combined with the establishment of new cartographic services or the improvement of existing ones. In some cases, the United Nations system may be able to arrange for the

pooling of such services, especially in newly independent countries, on a regional or sub-regional basis, and regional cartographic conferences may well inspire such developments. Conferences of this nature also tend to bring about a wider measure of international standardization, which in turn makes demands on services at Headquarters.

New techniques of airborne surveying and photo-interpretation for the production of topical, geophysical and other maps can be of crucial value to developing countries. Improvements in such techniques will have to be closely followed, and disseminated by the preparation of studies, the holding of seminars, and so on.

### 3. WATER RESOURCES DEVELOPMENT

In industrial areas which are now experiencing water shortages, and in developing countries hampered by lack of water, the development of an adequate water supply will be one of the most difficult problems in the years ahead. A number of United Nations organizations are dealing with various aspects of this problem, and the need to co-ordinate and strengthen their work was recognized by the formation, in 1959, of the Water Resources Development Centre. The Economic and Social Council has asked this Centre to propose a programme of priorities for the development decade. This programme will be presented in the spring of 1963; meanwhile, it is already evident that priority will have to be given to country surveys of water needs and resources, and to work on international river basins. The work to be done is briefly described below:

#### (i) *Country surveys of water needs and resources*

If the water resources development of a country is to be effectively planned, it is essential to make a general assessment of the present and future water needs of each sub-region of the country, and to collect information on available surface and underground water resources. Experience has shown that in many cases a successful country survey, carried out with the co-operation of various government departments, will bring out the need for a central government office to determine general water policy and to co-ordinate the development of water resources. The early establishment of such a central office may enable developing countries to escape the proliferation of water agencies which has occurred elsewhere.

A much more effective use of water in old and new irrigation areas must be achieved. The misuse and waste of irrigation water leads to serious deterioration of the productive capacity of the soil through salinization and waterlogging.

It can be expected that demineralization of brackish water and sea-water will grow in importance with the development of more economic techniques for this purpose. This possibility is already being studied

in many country water surveys; it is hoped that additional surveys will be carried out in many other countries in the development decade. Some of these country surveys have provided the data necessary for Special Fund projects.

(ii) *Development of international river basins*

Practically all the big rivers of the world are international, and the emergence of many new and often small States has had the effect of internationalizing a number of rivers not previously in that category. The drainage areas of international rivers cover about four-fifths of Latin America and Africa South of the Sahara and a substantial part of the Far East. Nevertheless, only a very few international rivers are now being developed on a major scale.

Modern river basin development serves many purposes, including irrigation and drainage, electric power production, navigation, flood control, watershed management, domestic and industrial water supply, recreation, and wildlife conservation.

Regional and international co-operation is clearly necessary for proper development of water resources. During the past few years the United Nations, in co-operation with a number of specialized agencies, has assisted in the co-ordinated and co-operative studies which have been carried out with a view to developing the Lower Mekong Basin.<sup>2</sup> Similarly, the IBRD has brought about an agreement on the utilization of the waters of the Indus Basin.

A recent seminar on international river basin development, held in Vancouver, recommended that the United Nations and other international agencies should try to stimulate development by more research, training, lending and consultation. In accordance with other recommendations of the seminar it is now proposed that the United Nations should intensify its engineering, economic and social studies of selected international rivers during the development decade, so as to lay the foundations for agreement among the countries concerned, as a preliminary to the effective development of these river basins.

(iii) *Community water supplies*

The lack of suitable and adequate community water supplies is a major deterrent to the improvement of health and to general progress, especially in the developing countries. It is estimated that in urban areas alone some 250 million people are not now supplied with piped water and that urban populations are growing at two or three times the rate of new water supply construction. While the present construction rate is less than \$50 million a year, water supplies would have to be constructed at the rate of about \$400 million a year (excluding North America and Europe), if the provision of piped water is to

<sup>2</sup> This project is described in annex II.

catch up with, and keep pace with, the growth of urban population. It is thought that the provision of water supplies to rural communities will require efforts on a comparable scale.

This situation requires that countries develop effective water supply agencies to plan, build and operate water systems; make realistic plans for financing these systems; and train technical staff. United Nations organizations are providing some technical and financial support for the development of community water supply programmes. It is proposed that this co-operative effort be extended and expanded, with major emphasis on action programmes as an essential element in social, economic and health development.

#### 4. MINERAL RESOURCES DEVELOPMENT

Developing countries are turning increasingly to the United Nations for assistance in such matters as geological mapping and pre-investment exploration and the evaluation of specific deposits, the establishment of geological and mining institutes, and the preparation of modern mining legislation. Government requests for similar action will certainly increase though it is not possible to say by how much. It can be foreseen, however, that special action will be required during the development decade to assist in rapid mineral exploration and co-operative surveys of geological regions or basins covering several neighbouring countries. More attention should also be given to the discovery and development of relatively small mineral deposits which would not attract foreign capital and would be unsuitable for export development, but would still be of local and national importance. An indication of the kind of work that will be required is given below:

##### (i) *Rapid mineral exploration*

Aerial photography and airborne geophysical surveys can speed up the work of geological exploration and reduce costs dramatically. A number of Special Fund projects using these techniques are now being carried out.

With the experience now available in the United Nations, a sustained effort to increase rapid mineral exploration in many developing countries would be possible during the development decade, but the world-wide introduction of modern exploration techniques will require funds and technicians. Few developing countries have experts who can prepare photogeological maps from aerial photographs, or the experts and facilities for airborne geological surveys. The developing countries would of course have to ensure support for such projects, and for the utilization of the knowledge gained.

##### (ii) *Co-operative exploration of geological basins*

Much duplication and wasted effort in mineral exploration could be avoided if surveys and service establishments were organized co-

operatively by neighbouring countries. Geological basins are similar in this respect to international river basins, and governments may well ask the United Nations for the same kind of assistance as has been given for integrated river basin development.

Co-operation between countries, especially small countries within the same geological basin, would afford considerable savings in airborne and other surveying. The preparation of maps and the collection of data could be standardized, more effective geological and mining institutes established, and scarce skills better utilized. Such co-operation could then be gradually extended and joint undertakings formed for the exploitation of minerals.

#### 5. ENERGY RESOURCE DEVELOPMENT AND ELECTRIFICATION

Power consumption is increasing very rapidly in less developed countries, and may, perhaps, treble in the next ten years, though this expansion will require an investment of at least \$2 billion per year. Lack of an adequate supply of power at reasonable cost at the right places can seriously hamper the industrial expansion and speedy implementation of the development plans of these countries. Power resources development therefore is a basic prerequisite for the economic growth of the under-developed areas.

The next decade will see an important addition to the sources of energy which can be used to help the under-developed countries in meeting their power shortages. After two decades of research and development, nuclear power is now entering the stage where it is being used commercially, and may become competitive in many countries by the end of the decade. Some under-developed countries, especially those which lack abundant energy resources, may be able to utilize nuclear power with benefit. In fact the next few years are expected to witness the installation of nuclear power stations in some of these countries.

The United Nations system will be called upon for major action in the field of energy and resources development and electrification. While specific needs will vary from country to country it is apparent, to judge from the requests which have been received, that the developing countries need help in such areas as: surveys of energy resources, estimates of power requirements covering short-term and long-term needs, economic evaluation of various schemes for meeting power needs, planning of power development programmes, including those to meet the more urgent and basic requirements for electricity in predominantly rural areas, and the implementation of power programmes. This last will often pose considerable problems in providing elementary, as well as advanced, technical training facilities.

The carrying out of surveys and assessments of natural energy resources, electric power requirements and so on, implies the existence

of essential methodological studies in this field. In particular it will be necessary to furnish, for use in the context of rapidly developing economies, methodological studies in three main fields: the assessment of hydro and fuel resources; the forecasting and planning of short-term and medium-term energy requirements; and the formulating of development criteria to assist in making a choice between alternative investment programmes.

In assessing the possibilities of new sources of energy which are expected to come into effective use by the end of the decade, due regard should be paid to the long-term educational implications of such developments and the means of dealing with them. In addition to making necessary adjustments to educational plans to meet the new situation, there could, for example, be "pools" of the required technical and scientific personnel so that they could transfer where necessary from more traditional into new industries.

#### (i) *Survey of energy resources*

One basic step towards power development is to try to obtain as comprehensive and accurate a picture as possible of the potential resources of hydro power, fossil fuel (including as appropriate solid, liquid and gaseous mineral fuels and potential sources of uranium) and also to try to assess the proper role of any important non-commercial fuels which may be in use, as well as the price and availability of fuels from abroad. This is particularly hard to undertake in less developed countries owing to the lack of information available. It is often extremely difficult, for example, to come to any firm conclusion regarding how much hydro development may be feasible in a certain area because for most river basins reliable rainfall and riverflow data over a sufficient number of years are not available. To obtain such dependable data the establishment or development of extensive hydrological and meteorological networks is necessary. In the case of fuel (both fossil and nuclear) the situation is even more complicated because the surveying of the natural resources of a country may reveal new sources which will affect considerably the short-term energy picture. For these reasons it is important to revise energy resources estimates rather often. In these surveys the possible hydro locations should be classified in terms of accessibility and other relevant economic criteria. The fossil fuel and uranium deposits should be analysed according to their total resources, quality and capital requirements for exploitation. Surveys of energy resources, including the formulation of long-term energy development programming, are being carried out in a number of countries through the United Nations system but many more will be required.

#### (ii) *Estimates of energy needs*

A realistic estimate of the power requirements of a country is an essential step in the formulation of a power development programme.

Systematic surveys of energy needs will have to be performed periodically at rather short intervals, because in a country undergoing a process of rapid development, estimates of power demand are subject to wide uncertainties. Industrial development planning in such countries leads to the preparation of a great variety of projects, the implementation and timing of which are understandably subject to revisions and changes. Moreover, the introduction of new power supplies in a particular region lacking such supplies is commonly found in practice to attract to the area, very rapidly, new industries and lead to requirements far in excess of those which could reasonably be forecast. Forecasts of power consumption, therefore, vary within much wider limits than in the case of highly industrialized countries. Apart from the power needs in the more industrialized areas, a careful study should in particular be made of the needs for electricity in rural areas, which normally constitute the major part of a developing country. This aspect of power requirements in under-developed countries has been often ignored in the past and this has given rise to serious economic and social problems.

### (iii) *Planning of power development*

The actual power programmes must take into account the available energy resources (including possible imports), projected load demand, financial resources and economic considerations of the power system. Besides the construction of power stations, the addition of transmission and distribution lines and sub-stations is a matter of primary importance. The proper selection of unit sizes is also important. The standardization of various types of equipment is likely to require careful consideration, and it may be pointed out that the under-developed countries need small as well as large power units. In fact the potential of local small-scale power supplies is often overlooked. While the small ones (from a few hundred kilowatts to, say, 25 megawatts) are needed for isolated areas not connected to grids, the large (100-200 megawatts) units can be easily absorbed in certain cases in the industrial enclaves existing in some of the developing countries.

The detailed planning of a power programme requires careful consideration of different possible sources such as hydro, thermal, geothermal, nuclear and others. Making a selection from among these possibilities can be a very difficult task. For example, an estimate of the costs and economics of a hydro power station is complicated by the multipurpose nature of most hydro projects which may provide flood-control, water supply, irrigation and recreation benefits as well as power. The selection of a certain type of power station, and its siting, may influence the construction of transmission lines, or a pipeline, railroad and so on, which may provide other benefits. On the other hand, it is pertinent to point out that extra benefits normally mean in one way or other a supplementary financial burden for which funds may not be readily available. This illustrates the complexity of the problem

of selecting the most adequate sources of power to implement any particular programme. In this connexion the IAEA, the United Nations and the International Bank have already helped in evaluating the relative prospects for nuclear power in various less developed countries. It is expected that the number of such studies will increase in the near future.

Rural electrification poses special problems but it is likely to offer a primary opportunity of raising living standards in many regions throughout a developing country if some elementary applications of electricity are available in selected centres to demonstrate its advantages at the small farming and handicraft level. Perhaps the main difficulty is the necessity for using, in the initial stages, small plants which often require fuel transported over long distances at great cost. In this context, the recent development of small nuclear power reactors which can operate from three to five years without refuelling, is of significance. In addition to stationary diesel generating sets, it is possible to use very small and inexpensive hydro plants or mobile generating units including gas turbines, and also to exploit non-conventional power sources such as wind and solar energy, geothermal power sources and so on. All these may play an important part in supplying purely local requirements, which initially must usually be on a small scale. The United Nations has followed these developments closely and in 1961 convened a Conference on New Sources of Energy.

#### *(iv) Implementation of power programmes*

Even when a comprehensive and realistic power development programme has been established, its implementation will pose numerous problems. The United Nations and the agencies have received numerous requests in this connexion. About one-third of all the International Bank's lending has been for electric power generation and distribution projects. Considering that major developments in electrification in under-developed countries are expected to take place in the next decade, the need for financial assistance will undoubtedly increase. In addition, experts will be needed to advise on the technical aspects of the problems connected with building power stations and expanding grids. The training of specialized technical personnel poses a problem here as elsewhere.

### **C. Industrial development in the development decade**

#### **1. GENERAL PROGRAMME**

It has been estimated that if the increase of 5 per cent per year in aggregate incomes, set by the General Assembly as the target for the end of the development decade, is to be achieved, manufacturing output in the developing countries will have to rise by no less than 130 per cent, while their demand for imports of industrial equipment

is expected to rise from \$3 billion to more than \$6 billion during the same period.

The General Assembly has expressed concern over the inadequacy of what is being done to help industrial development in the developing countries, and the Economic and Social Council has stated that more technical assistance and pre-investment expenditures must be devoted to industrial development, and that the work of the Secretariat in this field—particularly through the creation of the Industrial Development Centre—should be strengthened.

The programme of action proposed for the development decade includes research and operational activities which are complementary and mutually supporting. They are as follows:

Support of industrial planning and project programming;

Extension of industrial advisory services;

Promotion of small industries, with special emphasis on the establishment of industrial estates;

Industrial training.

These activities are described in greater detail in the following paragraphs.

## 2. SUPPORT OF INDUSTRIAL PLANNING AND PROJECT PROGRAMMING

The Committee for Industrial Development has expressed the view that planning and programming are essential to continued and more rapid industrial development, and that unplanned industrialization is likely to be wasteful of resources.

With this in mind, it is intended during the development decade to make studies of project programming of the problems connected with the organization of planning, and of ways of putting planning into practice. At the same time, there will be a systematic evaluation of the experience that has been gained with the planning methods now in use. Particular attention will be given to drawing up priorities for industries, and making forecasts of the demand for industrial products. In the past, it has sometimes proved difficult to select individual projects because data on individual industries, in a form suitable for use in development programmes, have not been available. Lack of such data handicaps financial institutions as well as planning agencies, and if the necessary information could be collected it would greatly help to make industrial programmes more effective, particularly by revealing, far enough in advance, the existence of factors which may hold up industrial growth. If a central body, such as the United Nations, were to collect and analyse the data needed for national plans, much duplication of effort would be avoided.

### 3. EXTENSION OF INDUSTRIAL ADVISORY SERVICES

Advisory assistance could be provided for the following stages of planning:

- (i) Planning of industrial programmes as part of the country's general development programme;
- (ii) Studies to determine whether the project is feasible;
- (iii) Establishment of the plant or project;
- (iv) Operation of the plant or project.

It is proposed to assemble a group of experts with supporting staff; each expert will be familiar with industrial programming in general and with particular sectors of industry, but specialized consultants will also be needed in certain cases. Close co-operation between the economic and technical experts should ensure greater co-ordination of the economic and engineering aspects of industrial planning.

What has already been said about the crucial difficulty of finding high-level technicians is applicable with full force to this proposal. It is realized that the technical knowledge required for this work largely resides in specialized private consulting organizations and firms. Moreover, mistakes made by acting on unsound or incompetent advice can be particularly costly in the field of industry. At the same time, it should be emphasized that this proposal is made against the background of the Economic and Social Council recommendation for a considerably strengthened staff and other resources of the Secretariat in the industrial field.

### 4. PROMOTION OF SMALLER-SCALE INDUSTRIES

It is particularly difficult for smaller-scale industries, which are an important feature of industrialization in its earlier stages, to obtain effective assistance from normal government or commercial sources, and for this reason the United Nations system proposes to take the following action to promote the modernization and development of smaller-scale industries:

- (i) The establishment of industrial estates;
- (ii) The creation of specialized institutions to help small industries;
- (iii) The provision of increased assistance in obtaining financing.

#### (i) *Establishment of industrial estates*

An industrial estate is a carefully selected and developed tract of land on which ready-made general-purpose factories and certain common facilities and services are provided. This has proved to be an effective way of encouraging new enterprises and raising industrial productivity. It can also have the advantage of ensuring that industries are suitably located, thus creating a healthier social environment.

Many such estates are being established or planned in developing countries, and the United Nations, under its technical assistance programme or through the Special Fund, is helping a number of Governments in this way. IDA also expects to enter this field. The combination of industrial estates with better housing and other social facilities may well lead to a new concept, in developing countries, of what an industrial community should be.

The assistance rendered by the United Nations and the Special Fund would consist normally of a feasibility survey of the project, to see where the estate is to be located, what the basic requirements will be and what the development prospects are, and to estimate total costs. At a later stage, a team of experts would be sent to advise on the planning, construction and initial operation of the estate; the assistance given by EPTA or by the Special Fund is restricted to pre-investment activities.

The Special Fund is prepared, in addition, to support the establishment of a small-scale industries service institute as part of an industrial estate, as well as the establishment of certain pilot facilities.

(ii) *Specialized institutions to help small industries*

Technological institutes have proved their worth in furthering industrial growth in developing countries. Twenty-two such institutes, nine of which are in operation, have already been established with the assistance of the Special Fund. Some of these are general institutes while others cater for specific industries, and institutes of both types are successfully working in developing countries.

The purpose of these institutes is to undertake investigation, research, analysis and testing. They carry out experiments and research in industrial technology; study the use of indigenous resources; provide industry with technical and economic advice; survey factories to improve production methods; develop equipment, processes and products for local manufacture, develop the use of substitute or residual materials; test equipment, materials and products; promote technical training; and prepare and disseminate technical information.

There are also management service centres which provide guidance, advice and technical services to industry, and particularly to smaller-scale industrial establishments which cannot afford to employ permanent specialists. These centres advise on marketing, accounting, administration and the training of staff for management, including foremen. They are in many ways the industrial equivalent of the agricultural extension service. The Special Fund has already given assistance to centres of this type.

It is proposed to give stronger support to technological research institutes and management service centres during the development decade. In this connexion, the ILO expects that its work in this field

will expand rapidly; small industry service institutes of a specialized nature will be established, and small undertakings will be generally encouraged to work together on co-operative lines.

(iii) *Increased assistance in obtaining financing*

The financing of small-scale industries presents special challenges regarding both external and domestic financing. While direct industrial lending by the International Bank has gone for the most part to large enterprises, the Bank has indirectly financed smaller-scale industry through its assistance to privately-owned development banks. Bank funds thus reach relatively small enterprises for which direct Bank lending would be administratively impracticable and uneconomic. Now that IFC is authorized to make equity investments, the coming years will undoubtedly see joint Bank/IFC assistance to privately-owned industrial development banks, with the Bank providing loan capital and IFC providing equity.

In some countries governments have established special institutions for assistance to cottage industry and to small entrepreneurs. There may be opportunity for the United Nations system to encourage further action in this direction.

The specific problem of financing small-scale industries clearly still constitutes a gap. The Secretary-General proposes that in the event of new sources of United Nations financing being opened up during the Development Decade, funds for the financing of industrial estates and other aid to smaller-scale industry generally be considered, preferably as part of more broadly defined purposes. An average 10-acre industrial estate may cost about \$250,000 for land development, basic utilities and factory buildings, but this figure does not include the cost of land nor any common facilities. The cost of providing housing and other essential community services for the population attached to the estate could add a multiple of this, if such facilities are required. It will be seen that the financing of even a few estates can be a heavy burden for a small and poor country.

## 5. INDUSTRIAL TRAINING

The ILO intends to devote increasing attention to training projects which constitute a major pre-requisite for successful industrial development. Such activities comprise all types of training: for young persons or adults, whether in employment or unemployed; for skilled workers, technicians, or instructors; for foremen or supervisors. Training will be designed to teach new branches of knowledge or to refresh, complete or improve knowledge and skills. Multi-purpose projects would provide additional advantages whereby training schemes can serve the needs of industry generally and small-scale industries and handicrafts and certain occupations in rural areas in particular; but careful co-ordination

based on thorough knowledge of needs and resources in the country concerned is a vital pre-requisite for such action.

The ILO's future programme dealing with industrial training at all levels will be focused especially upon the development of practising managers and the training of specialists in various branches of management, public or private. Such training would contain a very large element of practical work carried out by the trainees under expert guidance, and would normally take place outside educational institutions, but use existing facilities where appropriate. Practically all the projects would be carried out in conjunction with national productivity and/or management development centres, the first objective being to train persons in the countries concerned who will later take over the training work of outside experts. Moreover, the programme will be largely concerned with management functions within the enterprise, and would not be related to industrialization policies, the location of industry or the broader questions of industrial development, for which separate machinery seems appropriate.

## **D. Housing and urban development in the development decade**

### 1. DIMENSIONS OF THE PROBLEM

It is estimated that over 1,000 million people in Africa, Asia and Latin America—about half the total population of these continents—are homeless or live in housing which is a health hazard and an affront to human dignity. Major cities in these areas have large hovel settlements in which as much as 20 or 30 per cent of a city's population may live in rudimentary shelters, with no water, sewers, roads or other community facilities. Rural areas are even more deficient in the basic services and facilities necessary for healthy rural communities which can reduce migration to urban areas. In cities and rural areas alike, conditions are aggravated by unduly high rents which critically reduce expenditure on food or clothing, and by insecurity of tenure. Dissatisfaction with housing and living conditions leads to political and social instability and tensions.

In virtually all developing countries housing conditions are deteriorating steadily, despite the fact that these countries are allocating to housing a share of gross domestic fixed investment ranging from 12 per cent to as high as 30 per cent. To make matters worse, it is estimated that over 200 million new inhabitants will crowd into the cities of Africa, Asia and Latin America during the development decade.

Urgent measures must be taken now to improve both rural and urban housing if the cities are not to spread out into vast slums and shanty towns breeding ill-health and misery and threatening a breakdown of orderly civic and national life.

## 2. BENEFITS OF AN IMPROVEMENT PROGRAMME

Employment in building, which is often the first step in the movement from agricultural to industrial employment, can be expanded particularly rapidly. It is labour-intensive and the necessary domestic skills and raw materials, and markets for them, already exist. An efficient building industry is one of the prime requirements if the cost of development investment is to be kept down. If a 10 per cent gain could be made in operating efficiency in building, and if this saving could be made available for increased investment, this alone could move the present growth rate one-fifth of the way towards the 5 per cent per annum target set for the end of the development decade. This 10 per cent gain could be achieved by introducing into the largely traditional building and building materials industries in the less developed countries more advanced ideas of production and improved production techniques and organization; it goes without saying that these innovations would have to be adapted to suit local resources and requirements.

People as a whole can readily appreciate the tangible benefits which they get from housing and urban development, and thus need relatively little encouragement to assist by capital formation and savings, and by contributing their labour. The skills which they acquire through self-help and mutual aid building schemes, assisted by small outlays of cash from international sources, will be valuable in general industrial development. Improvements in housing spur people to increased effort in the matter of training and saving, and give personal meaning to economic progress.

## 3. CURRENT INTERNATIONAL ASSISTANCE TO HOUSING AND URBAN DEVELOPMENT

The IDA finances municipal water supply schemes and pilot housing projects. By March 1962 it had provided \$6.4 million for municipal water supply schemes but had not yet engaged in pilot housing projects. The IBRD does not normally finance housing and urban development but a number of loans for industrial projects have been made, each related to the total financing of the project including the necessary housing and urban development. United Nations aid has been of a technical assistance nature in the absence of substantial funds or other resources to undertake the financing of pilot and other projects. There has been increased demand on the United Nations, including the regional commissions and the specialized agencies, to expand their housing and urban development programmes. Regional Housing Centres and Physical Planning Institutes have been established with the assistance of United Nations experts and equipment, and requests for further assistance have been received. The Special Fund makes grants to building research and housing institutes to reduce construction costs and has also assisted a building materials research laboratory.

The Charter of Punta del Este establishing the Alliance for Progress has among its goals to increase the construction of low-cost houses for low-income families. The United States of America has created a social development fund of \$500 million to be managed chiefly by the Inter-American Development Bank (IDB) for agrarian reform and improvement, housing for low-income families, communal sewerage and water facilities and education. The IDB has begun to make substantial loans to Latin American countries for housing, community facilities, building equipment and building materials equipment. These loans are used to finance projects expected to have a multiplier effect in expanding housing programmes, mobilizing domestic savings for housing and providing an opportunity for non-monetized labour and materials to participate in self-help and mutual aid projects.

#### 4. RECOMMENDATIONS BY THE GROUP OF EXPERTS ON HOUSING AND URBAN DEVELOPMENT IN THE DEVELOPMENT DECADE

Earlier this year a United Nations Group of Experts recommended that the improvement of housing and urban development should have high priority in the decade of development and that the United Nations should assist in, and sponsor as part of the development decade, a ten-year programme for urban and rural improvement combining international aid, national efforts, local finance and self-help. They suggested that a United Nations fund or pool of equipment, technical services and financial resources should be established on the basis of the response by Member States to General Assembly resolution 1508 (XV). The Group considered that a substantial contribution in funds, equipment, materials and services from all countries is essential to strengthen the United Nations aid to the developing countries where the crisis in housing and urban development is assuming dramatic and serious proportions. The Group recommended that the United Nations fund or pool be managed by a permanent organ within the United Nations, composed of competent experts. It further recommended that the unit of the United Nations Secretariat dealing with housing, building and urban and regional development should be strengthened.

#### 5. TARGETS FOR HOUSING AND URBAN DEVELOPMENT IN THE DECADE OF DEVELOPMENT

In Africa, Asia and Latin America, from 19 to 24 million dwellings should be constructed annually throughout the decade 1960-1970 to eliminate existing shortages in 30 years, to house the increase in population and to meet current obsolescence. These targets include:

(a) Construction by 1965 of 4 million dwellings and ancillary facilities annually in urban areas, and 4.6 million dwellings and ancillary facilities in rural areas, to house the increase in population. By 1970 these annual rates should have risen to over 5 million dwellings each in both urban areas and rural areas.

(b) The improvement of "squatter" or "shanty-town" settlements within a programme to eliminate shortages in 30 years and meet current obsolescence. This would require by 1970 about 6 million dwellings annually to eliminate shortages and from 4 to 9 million dwellings annually to meet current obsolescence.

Construction on the foregoing scale at conventional cost levels would consume investment resources equivalent to 10 per cent of gross national product or in many cases the entire investment resources available in less developed countries. A more tolerable cost level must therefore be found.

It is estimated on the basis of actual experience in all the three large under-developed regions that with intensified research into low-cost solutions, with mass projects and maximum utilization of non-monetized resources in labour and materials, the monetary outlays could be brought down to about \$500 for each urban dwelling unit and another \$500 per dwelling unit for the ancillary urban services and facilities. The monetary outlay on dwelling and ancillary services and facilities in rural areas should not exceed \$200 per dwelling unit because of the large possibilities in rural areas for aided self-help and mutual aid building, using non-monetized labour and materials.

The cost of providing the required housing and ancillary services and facilities at acceptable standards in the continents of Africa, Asia and Latin America would be much above what these countries can now make available or what is likely to be available under present conditions for this purpose from external assistance. For this reason it seems certain that the present situation will deteriorate rather than improve in the years immediately ahead if no new action is taken.

## 6. PROPOSALS FOR INCREASED UNITED NATIONS ASSISTANCE

A United Nations fund or pool has been recommended by the Expert Group on Housing and Urban Development. The Social Commission has recommended that appropriate additional resources be available from the Special Fund and EPTA for housing and related development and this makes it even more important that the target of \$150 million for these two programmes should be achieved without delay. The initial objective of this increased assistance could be pilot or demonstration projects to establish, with wide international technical co-operation, lower building cost levels which would help to bring better housing and urban development in the developing countries within the economic reach of low-income families and within the capacity of the economies of those countries. Another objective would be to assist, by the provision of "seed-capital", in the establishment or extension of savings and loan associations, mortgage banks etc., in order to create the necessary mechanism for the expansion of long-term housing credit. A third major objective would be to implement the recommendation of the Expert Group on the improvement of "squatter"

or "shanty-town" settlements. Pilot projects could be undertaken in relation to specific settlements to facilitate ownership of building plots, to provide water and sewerage services and other facilities, and to organize self-help and mutual aid in the construction or improvement of housing with minimum outlays. The additional resources could, if sufficient, also be used to establish revolving funds which would provide short-term financing of construction in progress. (It is to be expected that the new Special Committee of the Council suggested by the Social Commission at its recent session will make recommendations on the most effective use of these resources.)

Generally, the uses made of increased United Nations assistance would be of a strategic or pilot nature designed to lead to the release of latent domestic resources. The construction of housing and ancillary services on the scale required would ultimately depend, especially in urban areas, on the availability of sufficient long-term credit. Domestic resources, expanded through the growth of national income and through the mobilization of savings by an expanded savings and loan system, must provide the main source of such long-term credit. It is evident, however, from the estimates already cited, that domestic resources would need to be supplemented by external funds if the investment required is to be realized. The investment of private external funds in housing and urban development should be capable of expansion since ready markets exist. The Expert Group has recommended that the United Nations should explore the use of international and other aids, credit devices and financing of essential trade in equipment and materials for low-cost housing and urban development. It is proposed that in this context an expert examination be made under United Nations auspices of the desirability and feasibility of an international insurance or guarantee system to encourage the investment of external funds in dwelling construction, provision of municipal building plots and services, building materials production and housing credit institutes.

Food surpluses could also become a form of international assistance to housing and urban development. The food could be directly provided to persons engaged in self-help building or to building workers generally. The Report of the Director-General of FAO on *Development Through Food* has stated that food aid can serve as additional capital and can help implement labour-intensive projects. The General Assembly, in setting up the World Food Programme, specifically asked for expert studies which would aid in the consideration of the future development of multilateral food programmes. Food surpluses could also be an important element in controlling any inflationary tendencies which might develop from the expansion of housing and urban development programmes.

The development decade should provide for intensified international exchange of experience, skill and knowledge both between developing countries themselves and with the more developed countries; provision on an increased scale of technical services, experts, advisers and fellow-

ships for study abroad; organization of conferences, seminars, workshops, study tours and exhibitions. This technical assistance should also include training of personnel, administrative and technical, and advice on the formulation and implementation of housing and urban development programmes including administrative and organizational arrangements. Standardization and modular co-ordination of building materials and components would be a primary objective.

The establishment on the foregoing lines of a new programme of international aid to housing and urban development in funds, services and equipment would serve as part of an integrated approach to the problems of economic and social under-development.

### **E. Health in the development decade**

The World Health Assembly and the Executive Board of the World Health Organization have repeatedly drawn the attention of Governments to the direct relationship between economic, social and health factors in the economic development of under-developed countries. The same approach was reflected in the Third Programme of Work for a Specific Period adopted by the Thirteenth World Health Assembly, wherein health is seen in its proper socio-economic context. More recently the Executive Board of WHO, in a resolution adopted in January 1962, requested the Director-General to co-operate with the Secretary-General in making proposals for the United Nations development decade. At the same time, it recommended to Governments that they undertake, with the assistance of WHO if they so wished, a ten-year public health programme to raise health standards, with certain specific objectives. These objectives included the preparation of national plans for the development of public health programmes for the decade and their co-ordination with other related plans; concentration on the education and training of professional and auxiliary staff for strengthening health services, with specific measurable targets for expanding each category of staff, depending on pre-determined needs for each; establishment as baselines of certain indices of current health situations, so that progress towards various objectives could be measured; and the increase of national resources for the control of disease and the improvement of health.

#### **1. NATIONAL HEALTH PLANS**

Successful development depends ultimately on the ability of people to realize their individual capacities, which cannot be realized as long as the present major barriers of disease and inadequate health and sanitation facilities continue to exist.

The prevailing biological and environmental health hazards must be tackled if agriculture and industry are to develop. It is therefore imperative that a realistic appraisal of the situation be made and that

the planning and development of a network of minimum basic health services be regarded by those planning development as an essential pre-investment operation.

The preparation of a national public health plan involves the study and investigation of health needs and the available staff, equipment and buildings with a view to determining the priorities for action and the most economic and efficient ways of accomplishing them. The plan will provide the necessary information not only for those concerned in its execution, but also for the Government and the communities involved. Moreover, it will help international and other outside agencies to concentrate their assistance on nationally established priorities.

Few countries have at hand all the necessary information and statistical data on which to base a realistic ten-year health development plan. In most countries these will have to be obtained through surveys undertaken specifically for the purpose. If such surveys are carried out by a team of specialists in major sectors contributing to socio-economic activity, balanced planning will be facilitated.

Broadly speaking, the levels involved in a national health plan will be the central, the provincial and the local. The main function of central authorities is policy-making and that of local health administrations is essentially operational. Provincial health authorities have intermediate functions of both types. Co-ordination of these three is essential to ensure a homogenous plan and its harmonious execution. Historically, organized health work originated in urban centres and it has always tended to be slow in moving towards rural areas. Concentration on accelerating this desirable expansion should be a fundamental principle. Effective decentralization must be based on the strengthening of local health administrations to enable them to carry out their operational functions effectively. The active co-operation and participation of the people in health activities is essential, and can be best secured through health education within the educational system and in programmes of a "community development" nature which involve all technical departments in the government, with or without international advice and assistance. WHO attaches great weight to its participation in such programmes. While responsibility for planning lies ultimately with Governments WHO has strengthened its services for meeting requests in this important field, and will continue to do so.

## 2. EDUCATION AND TRAINING

The second component of the recommended programme of public health development for the decade is a concentrated effort to educate and train professional and auxiliary medical staff for strengthening health services; this requires the establishment of definite targets for expanding each category of staff, based on estimated needs. The efficiency of health services depends fundamentally on the quality of

suitably trained staff, and education and training is therefore a basic feature of the technical assistance given by WHO.

The key workers in any well-planned and well-organized health programme are the physician, the public health nurse, the public health engineer, the sanitarian, the dentist, the pharmacist and the laboratory specialist, but if these highly trained individuals are to serve most effectively, auxiliary workers must be trained to assist them. The programme of education and training must therefore be conceived at two levels, one for the professional and technical medical staff and one for auxiliary medical workers.

If the proposed targets for the under-developed countries are met each will have, by 1970, a minimum of:

- One physician per 10,000 population;
- One nurse per 5,000 population;
- One technician (laboratory, X-ray etc.) per 5,000 population;
- One health auxiliary per 1,000 population;
- One sanitarian per 15,000 population;
- One sanitary engineer per 250,000 population.

The efforts of countries to achieve their targets can be supplemented by international assistance which will include action at the national and regional level and regional and inter-agency collaboration. WHO will continue to assist countries in surveying their education and training needs, the actual and potential staffing resources, and the most efficient and economic ways of establishing or upgrading medical schools and facilities for the training of professional, paramedical and auxiliary staff through courses adapted to the needs of the countries concerned. Fellowships will be used to promote the training of key personnel and potential teachers. Regional training establishments may accelerate progress in providing national health services with competent national staff. WHO has a role to play in organizing appropriate inter-country seminars and workshops for the exchange of experience between health workers from different countries facing similar health problems.

### 3. HEALTH TARGETS FOR DEVELOPMENT

The third component of a possible programme of public health development is the establishment as baselines of certain indices of the current health situation of countries so that progress toward certain health goals can be measured. Target figures for the decade should be set in, for example, the following fields:

(a) *Infant mortality.* The present level should be ascertained and efforts made to lower it. Success attained in achieving a more favourable age composition of the more rapidly growing population groups will lead to greater social well-being.

(b) *Communicable diseases.* The incidence of diseases such as malaria, smallpox or other prevalent communicable diseases should be ascertained and efforts made to eradicate them, or at least to reduce their incidence to the point where they cease to be public health problems.

(c) *Nutrition.* In co-operation with FAO, sample surveys should be made to determine current nutrition standards and, if indicated, to carry out programmes for their improvement, the progress achieved being gauged against the baselines thus established.

(d) *Sanitation.* Basic facilities, such as a supply of potable water and the means for private or public sewage disposal should be made available to the urban and rural population. Accurate figures on the water supply position in countries and urban population centres in all parts of the world are not available, but it is estimated that some 250 million people in urban communities throughout the world now derive their water from sources other than piped water systems. If enough resources could be devoted to solving the problem, it should be possible to correct this situation within a period of fifteen years. To do this would require the construction of piped water systems to serve an estimated 20 million new consumers each year, at an estimated cost of \$400 million per year.

#### 4. FINANCIAL SUPPORT FOR HEALTH DEVELOPMENT

As the last item in the four-point programme outlined by the WHO Executive Board, Governments were recommended to devote more resources to the control of disease and the improvement of health.

A realistic target to ensure adequate financial support for the development of health during the decade would for many countries be an annual increase of between 10 and 15 per cent in the funds allocated by Governments for national health services, instead of the "normal" 5 to 7 per cent. Some under-developed countries will require increasing external assistance, bilaterally or through international agencies, to improve their public health services. WHO must increasingly co-ordinate this assistance given to countries in the field of health so as to ensure that it is applied to the best effect. WHO must also provide more advice to governments on the co-ordination of all activities in the public health field, irrespective of their financial source, and on the best ways of co-ordinating the health effort with that of other national agencies.

## F. Transport and communications in the development decade

### 1. TRANSPORT DEVELOPMENT

Although the developing countries have obviously a long way to go in building up adequate systems of transport, it can at least be said

that in tackling this problem, they have a choice between a variety of methods, from highway, rail and inland waterway transport, through air transport, to such modern methods as pipelines, monorails, hovercraft and so on. All these methods are continually being improved, and this makes the planning of transport development as a whole extremely difficult. Decisions in such matters are of crucial importance not only because of the costs involved, but also because the pattern of transportation affects, and even determines, social and economic relationships. Unfortunately no methods have been developed which will enable costs and benefits to be fully calculated while taking due account of the many other economic and social factors involved, and it will be important to develop an integrated process whereby work on the problems of specific sectors of transport and communications, with which various United Nations organizations are concerned, could be viewed in perspective. This could be achieved by developing methods of analysing the economic and technical relationships between transport and other activities in the development process, as well as analysing the data themselves on which the study of those relationships is based. This would help in the assessment of transport needs and would provide more effective support for actual transport operations.

Comprehensive studies of the transport sector as a whole, and of particular elements of the sector, which propose programmes for long-term improvement, expansion or modernization, as appropriate, have been undertaken in a number of countries by the United Nations system. Many more such studies will be called for over the decade. It will also be important to help countries to keep abreast of technological developments connected with transport. The cost of financing development and maintenance of transport systems is expected to make very heavy claims during the development decade on the resources of both the developing countries themselves and of financing agencies. This is indicated by the fact that at present about one-third of all International Bank lending has been for transport development, and IDA is also already very active in this field. In the light of this, the importance of careful surveys and other preparatory work can hardly be over-emphasized.

In addition to the general activities described above, there are four areas of activity to which particular attention should be devoted:

#### (i) *Aviation*

The rate of growth in aviation has posed particular problems in the developing countries. The amount of technical assistance available is sufficient to close the gap neither in formal training nor in on-the-job training. A recent survey covering thirteen of the most common aviation occupations in forty-five countries shows that by the end of 1962, there will be a backlog of some 7,500 people still requiring training. A rapid increase in training efforts is therefore required.

There is also a serious problem of ensuring that staffs are found to enable the developing countries to act as the responsible operators of aeronautical ground services, as inspectors of airlines, and as licensing authorities. In some cases, it might be possible to arrange a management contract to run the required services and to train the necessary supervisory staff within the government. If, for reasons of general policy, a Government is not willing to permit foreign firms to run its aviation ground services, and prefers to establish a governmental corporation, that corporation would have to be managed by experts of a kind not generally available in developing countries. In such cases, a team of experts could be provided under an OPEX scheme. The experts could train counterparts so that within a number of years, the government corporation could function with a purely national staff.

(ii) *Port development and legislation*

Provision has to be made for the transport needs of the hinterland and for the prospective flow through the ports, as well as for the technical requirements of coastal and maritime shipping and fishing. In this connexion, the need for revision of transport regulations and legislation has made itself felt; much port legislation, for example, is out of date and unsuited to the present-day needs of independent States. IMCO points out that during this process of revision, international requirements should be borne in mind.

(iii) *Regional railway systems*

Railway systems in the developing regions of Africa, Asia and Latin America are mostly isolated and are oriented towards the sea for the service of import-export trade; there are very few international links. Despite the emergence of new methods of transport, there may still be a case, in certain instances, for the development of a regional rail network, particularly where substantial, steady bulk volume can be developed, or where the pooling of rolling stock would offer significant economies. If such a network were to be developed it would be necessary to start by assessing the existing rail transport situation on a regional or sub-regional basis, and follow up that survey by more detailed work on financial, engineering and administrative aspects under multilateral arrangements such as those available through the United Nations.

(iv) *Transcontinental highways*

The plans for a Pan-American Highway (already in an advanced stage of completion) and an Asian Highway show the kind of project now being undertaken. These projects will probably be considerably expanded under international auspices, and similar programmes will be prepared elsewhere, particularly in Africa. Networks of transcontinental highways will have to be planned in advance and co-ordinated

with the general economic development plans of the countries concerned. The investment required for such large modern highways will have to be encouraged, and offered adequate protection. One method of doing this is to organize programmes for training staff to ensure that the highways are properly maintained. This is primarily a field for action by the regional economic commissions.

## 2. COMMUNICATIONS DEVELOPMENT

An adequate communications network is essential for government and industry, and for public information. Many of the developing countries have an inadequate network and will have to make a major effort, with external assistance, to develop one.

ITU has suggested that increased aid should be given for the extension and improvement of national telecommunication networks. While it is difficult to make any quantitative estimate of what could be done in the next few years, it seems probable that plans could be completed by 1965, and put into effect during the following five years. Governments would have to indicate what pattern of communications between the various parts of the country they wished to establish. ITU would help in preparing these plans and could, for example, draw up criteria to guide governments in formulating their requests for assistance in telecommunications.

Experience shows that the best way of stimulating development in telecommunications is to establish training institutes for operational staff and ITU can best assist in this matter by the provision of experts. At the same time, the highest priority should be given to the training of skilled workers and middle-level government officials; here, ITU could assist Governments to establish or improve special institutes for training such staff.

## 3. APPLICATIONS OF METEOROLOGY TO TRANSPORT AND COMMUNICATIONS

Although the applications of meteorology have a direct influence on various economic activities and their development, the importance of meteorological services for transport by air, ground and sea is such that meteorology has its natural place in any development plans concerning transport and communications. In this field, particular attention will be given by WMO to the intensification of research in view of developing the practical applications of meteorology such as forecasting for high altitude flights, measurement of visibility, tropical storm forecasting. The implementation of new techniques and, in particular, the installation of the necessary services for the users of meteorological information will also require a particular effort with a view to training scientific and technical meteorological personnel during the coming decade. In this connexion, the United Nations Expanded Pro-

gramme of Technical Assistance and the OPEX programmes may provide considerable assistance since present needs for training in the meteorological field are covered only to a very limited extent.

Plans for the establishment of training centres for technical personnel will be developed specially in Africa (four centres are envisaged) and also in Asia and Latin America. In addition, a series of symposia and seminars will be organized.

### **G. Media of communication and public information in the development decade**

The objectives of economic and social development can be served by the development of mass media of communication in the underdeveloped areas of the world. These media can be used, in the less developed as well as in the more advanced regions, to promote better public understanding of the national and international efforts which are being made to realize the objectives of the development decade.

#### **1. MEDIA OF COMMUNICATION**

The link between information media and economic and social advance has been recognized in several General Assembly resolutions and has been made the subject of several studies and reports.

Nearly 70 per cent of the total population of the world, living in more than 100 countries, at present lack adequate mass communication facilities. Development of the information media forms part of economic development as a whole and therefore may be assisted by resources drawn from technical assistance programmes.

#### *Forecast for the decade 1961-1970*

A UNESCO report and the consequent Council resolution 819 (XXXI) provide detailed guidance as to specific measures which may be taken for the expansion of the means of mass communication as part of the United Nations development decade.

The minimum standards established by UNESCO and endorsed by the Council are that for every 100 inhabitants in any country there should be at least ten copies of a daily newspaper, five radio sets and two cinema seats. These are standards which have not as yet been attained by some 2,000 million people. It has been roughly estimated that the establishment of new and expansion of existing facilities needed to reach the UNESCO target would necessitate an investment of slightly more than \$2,800 million. If educational television is included, the total cost of a development programme would be \$3,400 million. This is the sum required for capital expenditure only, without any provision for recurring annual costs.

The assistance to be provided by the international organizations might take three forms:

(i) The provision of experts to help draw up national plans for development of the information media, to serve as instructors at training establishments or as organizers of seminars, and to establish the necessary research facilities;

(ii) The provision of international or regional training facilities for instructors in national training establishments;

(iii) The institution of an extensive fellowship programme for acquisition of the professional skills and knowledge so urgently needed by many nations.

The foregoing estimates are for a development programme extending to 1975. It is hoped that the greater part of this programme could be accomplished during the period of the development decade.

## 2. PUBLIC SUPPORT FOR THE DEVELOPMENT DECADE

Considerable experience has been gained during the past years in another aspect of the problem—that of more effectively utilizing the technical means of communication and media of information for enlisting public support for the objectives set forth in General Assembly resolution 1710 (XVI). There is a need, therefore, during the forthcoming decade, to ensure that national and international information services are concentrated more closely on the task of presenting to the world public a clearer and more meaningful picture of the importance of economic and social development to the welfare of the world as a whole, and of the actual steps being taken, nationally and internationally, to achieve this end.

The primary responsibility must rest, of course, with national information media and services, public and private. However, a significant contribution to such national efforts can be made by the information services of the United Nations organizations.

## H. Science and technology in the development decade

The potential of science and technology for the improvement of man's way of life will certainly increase in the next ten years. As it is difficult to foresee with any precision the degree and speed of developments in the various disciplines, the following comments should be regarded as illustrative. It is possible, however, that progress in some areas such as devices for the reproduction and concentration of light or a new understanding of the fundamental science of life, may produce almost revolutionary results by the end of the decade. Nuclear power is now entering the commercial stage and indeed it is not improbable that towards the end of the decade it may be used more widely for propulsion. Other new sources of energy such as solar and wind

power plants may also be expected to become a practical reality. While such advances may sometimes first be used in the more highly developed countries they may be expected, in due course, to have a great impact on the rate of economic growth and living standards in the less developed countries. These countries will require assistance to determine the applications most suited to their economic needs, particularly bearing in mind their limited resources of trained manpower. In addition, many technological developments, such as the increase of automation, will have implications for the labour supply as a whole, and these also should be borne in mind.

Even in cases where the new technologies will not be used directly in the developing countries, their products can be expected to have a major effect. This will be so, for example, in the case of synthetic materials, which have their effect on demand for the natural fibres. The importance of production of artificial fibres, synthetic rubber and plastics has increased enormously. In addition to new non-nuclear catalysers and catalytic systems, the use of large radiation sources promises to make further significant advances in the next decade in the manufacture of products having superior mechanical and insulatory properties at lower temperatures and pressures. It is foreseen that there will be a number of nuclear reactors specifically for production of chemicals.

Transport and communications are vital for the economic development of the less developed areas. Helicopters are already being increasingly used, but their rotors present the main obstacle to their use on a very large scale. The solution here may well be in the air cushion principle which is most suitable for many areas of the world. Machines of this type are already going into commercial operation and by the end of the decade may very well be a commonplace sight.

In the not too distant future it is expected that meteorologists will be able to make longer range forecasts taking advantage of additional observations obtained by rockets and satellites. Electronic computers will be used for data processing and preparation of models upon which forecasts may be based. The forecasts may only be for up to two to three weeks in advance, but even so this information can be of immense importance in crop programming. It seems possible that "seeding" of clouds with dry ice or silver iodide can modify the amount of rainfall in certain areas where the timing of the rainfall is important. Such developments as these will no doubt play an important part in agricultural development.

Adequate water resources are a prerequisite for the development of any area. Already the Special Fund is playing a prominent part in supporting surveys. The future will see a marked increase in the application of isotope techniques to these problems, particularly those where a knowledge of the underground reserves is required in order to avoid over-exploitation of the available water.

In agriculture as in other domains, the training of scientists under the various aid programmes will enable the developing countries to embark on more consolidated research on problems characteristic of local conditions. Recognizing that hunger will continue to be one of the fundamental problems in the world, basic agricultural research will come to examine more fully the uptake of nutrients by crops and the exchange and movement of ions in the various types of local soils. Through this work it will be possible to advise on optimal cultural practices to improve crop yields. Research will continue into the life cycle of pests so that it will be possible to determine at which stage eradication measures are most effective. One also foresees the increased applicability of radiation to the eradication of pests. Mutations may be brought about which will present the plant breeder with a wider selection of types from which desirable strains may be developed more suited to the local environments: radiation will be increasingly used for this purpose. It is difficult to foresee the developments which will stand out, but certainly these general trends in agricultural research will be common to most of the developing areas and will contribute to raising the food supplies per person. One of the developments in the advanced countries, for example, which might have far reaching implications would be the use of radiation for the sterilization of food.

Developments in medicine and the promotion of health may be considered under two headings; those following the wider application of existing knowledge and those arising from new discoveries. The former will include the increasing conquest of communicable diseases and their vectors in developing and developed countries, the broadening of public health services and the continued improvement throughout the world of the hygiene of the environment. Of great value to the solution of the health problems of advanced countries arising from sickness and death from cancer and cardiovascular diseases are comparative studies in many countries to identify significant differences which may indicate possible causative factors.

Many developments in medicine spring from new discoveries in basic sciences such as biology, chemistry and physics. New discoveries may be made in genetics, chemotherapy, immunology and mental health. In developing countries the problem is one of gradual introduction of techniques already established in more advanced countries. Thus, for example, in the domain of applied science a transition from the now usual X-ray machines to radio-isotope sources for diagnosis and therapy can be expected: their independence from power supply sources and their ease of maintenance should prove most beneficial to developing countries.

## V. INTERNATIONAL TRADE

Developing countries must rely on merchandise exports as the main source of foreign exchange. The primary dependence of under-developed countries on exports is brought out forcibly by recent experience. In 1956-1959, for example, exports provided under-developed countries with six times more foreign exchange than they derived from total net long-term capital in-flows and official donations. Even so, export proceeds during the preceding decade covered only 90 per cent of import requirements, not even considering the payments on the consequently mounting external debts.

During the decade of the 1950's, the total imports of the developing countries seem to have increased at about the same rate as their total production. In the absence of detailed knowledge, which would require analysis of the development plans of individual countries, this trend may perhaps be projected as continuing into the development decade. This would mean that the total imports of the developing countries would increase by 5 per cent yearly over the average of the decade, and more towards the end, when they would reach about \$50 billions per year. If the share of export-based import capacity in the financing of total imports is not to deteriorate further, then the export quantum of the developing countries would also have to increase by 5 per cent yearly if their terms of trade with the more developed countries remain the same (or by more, if the terms of trade should continue to deteriorate). Within this total export quantum, certain categories (e.g. manufactured goods) would probably have to increase faster while the general target rate may not be attainable for certain primary goods. Total exports would have to reach \$45 billions by 1970, or more if existing debt commitments are considered, and if an appreciable part of the flow of capital during the decade requires repayment.

A study published in the *Economic Survey of Europe in 1960* suggested that to support the over-all rate of growth called for during the development decade, the proceeds from exports of non-traditional commodities would have to meet about one-third of the total import bill. This represents a "trade gap" which it will take a formidable effort toward trade expansion on the part of all trade partners to fill. The developed countries, specifically, will have to take into consideration the needs of developing countries in their regional integration schemes, in the determination of their trade policies and the substitution of internal measures of assistance and readjustments in place of trade barriers against developing countries in coping with the sometimes disruptive impact of increased imports from developing countries upon sectors of their own economies.

During the 1950's, the terms of trade of developing countries deteriorated substantially. As a result, even though export quantum rose more rapidly than the output of under-developed countries, the purchasing power of exports increased at a slower rate; a rapid rise in the flow of capital and other sources of foreign exchange, however, increased imports sufficiently to prevent rates of economic growth from falling. There is, fortunately, a reasonable hope that an accelerated flow of funds will, over the next few years, continue to be in line with the target of 1 per cent for foreign capital and assistance proposed by the General Assembly. But even this would not be sufficient to fill the gap without a successful effort at trade expansion. It must also be remembered that once the target of 1 per cent of national incomes is reached, the flow of such funds would thereafter increase at a rate determined by the growth of developed countries, i.e., perhaps 4-5 per cent. Such an expansion in in-flows of long-term development capital and aid to under-developed countries will clearly be modest indeed in relation to their needs, especially if the view that the events of the last years confirm a long-term structural weakness in primary commodity markets should prove justified.

These data give at least a general indication of the urgency of the problem of trade expansion. It should be borne in mind that a country's dependence on imports is not inflexible. A number of factors can operate to change the foreign trade requirements of countries. One important possibility is a change in a country's economic structure, which reduces dependence on imports, for example through the development of import-substituting industries. Another means by which the dependence on exports to developed countries may be reduced is through regional integration of less developed countries and an accompanying expansion of intra-trade within the economically integrated region. In this, as in the estimation of the import needs of developing countries, the regional commissions are well fitted to assist. Thus, provided that appropriate policies for shaping the structure of production and trade can be put into effect, output can be made to grow more rapidly than import capacity. But as against this it should also be remembered that since a high proportion of investment goods are imported by the developing countries, an increase in the rate of capital formation—as is clearly necessary during the development decade—will raise import requirements more than in proportion. Our present knowledge of these import-saving and import-requiring trends does not seem sufficient to venture forecasts of their relative strength.

Problems relating to trade expansion have increasingly engaged the attention of the Economic and Social Council and the General Assembly in recent sessions. The guidelines for the required action have been indicated in General Assembly resolution 1707 (XVI). They include the prompt undertaking of negotiations to facilitate expansion of the trade of developing countries, and the extension by economically developed countries to the less developed countries of advantages not

necessarily requiring full reciprocity. The more highly industrialized countries and developed countries belonging to regional and sub-regional groupings are called on to avoid undue protection of domestic production or other measures detrimental to commodity trade, to liberalize restrictive or discriminatory practices that limit the consumption and importation of commodities, especially those which have undergone maximum processing, from under-developed countries; and to avoid dumping and the unrestricted disposal of accumulated stocks.

The Ministers and the Contracting Parties of GATT decided in November 1958, against the background of the findings of a group of distinguished economists set up in 1957 to examine trends in international trade, to undertake a co-ordinated programme for the expansion of international trade. This programme has three elements: tariff reduction, trade in agricultural products and the trade problems of the less developed countries. These elements are interrelated and each one of them is of direct interest to less developed countries.

During the three years that followed the inauguration of the programme a great deal of detailed work was done. The further reduction of tariffs has been the task of the GATT 1960-61 Tariff Conference. In the Committee concerned with trade in agricultural products there have been consultations with most Contracting Parties on their national agricultural policies and an examination of the over-all effects of the use of non-tariff measures on certain groups of commodities which enter importantly into international trade. These groups have included tropical products, namely sugar and vegetable oils, as well as such products as meat and cereals which are also of very considerable importance to some less developed countries. In a report prepared in May 1961, the Committee presented its findings and conclusions. These showed clearly the widespread use of non-tariff measures for the protection of agriculture and the adverse effects of such measures on international agricultural trade. This report was before the GATT Ministerial meeting which was held in November 1961.

The Committee primarily concerned with the trade problems of less developed countries began its work with a detailed study of obstacles to the export of a selected group of products, including tea, coffee, cocoa, tobacco, cotton manufactures, vegetable seeds and oils, jute manufactures and certain other products. These were followed by similar studies on certain light engineering products and on some other products and semi-manufactures which less developed countries considered that they could produce on an economic basis. In the three years that followed the Committee reviewed existing obstacles, discussed with the importing countries the possibility of their removal and reported on the progress made. In September 1961, the Committee presented a special report which summarizes its findings and conclusions. A number of urgent recommendations were made by the Committee, all of which bear on the expansion of export possibilities for less developed countries.

Part of the Committee's work programme calls for an examination of the trade and payments aspects of the development plans of less developed countries in the light of the need of these countries for increased export earnings and development finance. The Committee has already examined the Third Five-Year Plan of India and the report on the examination was available to the Ministerial meeting in November 1961. Development plans put forward by other less developed countries will be similarly examined by the Committee.

Ministers met in November 1961 to review, in the light of the detailed studies and reports of the Committee set up under the trade expansion programme, the progress made under the programme and to give directives for the future work of the GATT in this field. A particularly important outcome of the Ministers' meeting from the point of view of the less developed countries is the Declaration on the Promotion of Trade of the Less-Developed Countries which was unanimously adopted by the Ministers. The Declaration contains guiding principles and sets out certain facts regarding tariff and non-tariff measures affecting access to markets under the headings of quantitative restrictions, tariffs, revenue duties, state-trading, preferences, subsidies and disposal of commodity surpluses. Further, the Declaration stresses the important contribution to the expansion of export earnings that can also be made by intensified efforts to improve the production and marketing methods of the less developed countries; the need for efforts to expand the export earnings of the less developed countries and efforts to lessen the instability of such earnings which result from fluctuations in primary commodity markets to proceed concurrently; and the important possibilities for encouraging sound economic development in the less developed countries through increased trade among themselves.

The Ministers agreed that their Governments would undertake to observe the guiding principles embodied in the Declaration to the fullest extent possible with the object of reducing in the near future obstacles to exports of less developed countries. Ministers also agreed that the Contracting Parties should take immediate steps to establish specific programmes of action, and where feasible target terminal dates, for progressive reduction and elimination of barriers to the exports of less developed countries. In this connexion, most Ministers agreed that the proposal for duty-free entry for tropical products should be given careful consideration. The Ministers further agreed that the Contracting Parties should be requested to draw up procedures for notifying and reviewing action taken by Contracting Parties in accordance with the programmes so established, or otherwise taken by Contracting Parties to improve market opportunities for the exports of less developed countries.

At their session immediately following the Ministers' meeting, the Contracting Parties took decisions to implement the directives received from Ministers, and work in accordance with these directives has

already been begun by the Committee concerned with the trade problems of the less developed countries. In addition, the Council of representatives of the Contracting Parties approved the setting up of a Special Group on Trade in Tropical Products which, taking into account all the present and foreseeable problems in international trade in such products, would consider ways of overcoming difficulties confronting less developed countries exporting these products and would make appropriate proposals.

As regards trade in agricultural products, the Ministers requested the Contracting Parties to adopt procedures designed to establish the basis for the negotiation of practical measures for the creation of acceptable conditions of access to world markets for agricultural commodities. Decisions to implement the Ministers' request were taken by the Contracting Parties. A group on cereals has met and has begun its consideration of all relevant aspects of the problem, including price levels. A group to consider problems relating to international trade in meat has also been established.

In the field of tariff reduction the Contracting Parties, following the meeting of Ministers, appointed a Working Party on Procedures for Tariff Reduction which will examine new procedures and techniques for the further reduction of tariff barriers on a most-favoured-nation basis in accordance with the terms of the GATT. Of particular interest to the less developed countries was the agreement reached by the Ministers that, in view of the stage of economic development reached by the less developed countries, a more flexible attitude should be taken with respect to the degree of reciprocity to be expected from these countries in the course of tariff negotiations.

International trade in cotton textiles is of great importance to certain less developed countries. Recently there has been a far-reaching development in this field, namely the drawing up, under the auspices of GATT, of an international Long-Term Arrangement on Cotton Textiles to supersede the existing Short-Term Arrangement which will expire at the end of September 1962. The underlying principle embodied in the Long-Term Arrangement is recognition of the need for an orderly expansion of trade in cotton textiles while, at the same time, avoiding disruptive effects in import markets. Earlier in this chapter, attention has been drawn to the necessary emphasis on trade expansion and the need to deal with disruptive effects by means not bearing on the trade volume of developing countries.

The activities of the IMF—to be intensified during the coming years now that its resources have been increased—are also significant. As a result of the Fund's assistance, countries concerned with world trade—developed and under-developed countries alike—have not had to face the severe dislocations of trade and payments which would otherwise have occurred. The infection of local deflationary pressures was kept in check and not allowed to spread throughout the world, as it did, for instance, in the 1930's.

The important contribution of other international institutions such as GATT, the IMF and the Committee on Commodity Problems of FAO towards meeting the problem of expanding the trade of under-developed countries is recognized and their work is indispensable to the success of the development decade. However, in view of the increasing attention devoted to this problem by the General Assembly, the Economic and Social Council, and other United Nations bodies, and in view of its increasing urgency, it is also necessary for the United Nations itself to deal with trade expansion more systematically and more continuously than in the past. This is indicated both by its broad membership and its over-all concern for development. The proper level of action for the United Nations is that of broad policy formulation, rather than detailed application or negotiations. Within the United Nations, the Charter assigns the predominant role in these matters clearly to the Economic and Social Council. It is for the Economic and Social Council to place itself in a position to discharge these functions in the best possible manner. The Economic and Social Council might want to broaden the role of its present Commission on International Commodity Trade to prepare its action also in the field of trade expansion in relation to growth and development, in addition to the problems of instability of trade in primary commodities.

Reference has been made earlier, in chapter II, to the importance of a rational consideration of trade aspects in the development of each country proceeding within the global picture of total demand and supply for the commodities concerned. In this connexion it is important to remember that for quite some time to come the foreign exchange receipts of developing countries will have to continue to depend on their sales of primary products, predominantly products of agricultural origin, which account for about four-fifths of world trade in primary commodities. The very processes of diversification of production and trade in developing countries depend in large measure on adequate sources of external purchasing power being available to them for purchases of capital goods. In order to ensure such adequate levels of export earnings, countries must keep themselves as well informed as possible of world commodity developments and prospects, with a view to assessing prospects for their own respective commodity exports. Reports covering this area of work are before the Economic and Social Council.

There are several directions in which the United Nations Secretariat would seek to provide the facts and analyses needed for formulating policies aiming at expanded levels of international trade. The Secretariat has already been requested by the General Assembly to intensify its work on projections of world economic trends. A major component of this work involves projections of international trade, including both the levels of trade and its direction. Individual primary commodity projections are also being undertaken as part of this programme. This programme of trade projections represents, therefore,

an intensification of work which has already begun. The Regional Commissions are in the best position to form a picture of the necessary growth of imports and likely growth of exports of the countries in their regions.

For these reasons, special importance attaches to international work on commodity projections and policies as tools of economic development. FAO, in a recent comprehensive study, *Agricultural Commodities—Projections for 1970*,<sup>1</sup> has taken the lead in providing such tools for development planners. The study forms part of a continuing programme undertaken in this field of work by the FAO Committee on Commodity Problems (CCP) and its specialized inter-governmental commodity study groups (now operating for wheat and coarse grains, rice, cocoa, coconut and coconut products, and citrus fruit). The CCP, aided by its commodity groups, endeavours by means of intergovernmental consultations and exchange of information on commodity plans, programmes, and policies to assist each of the participating Governments, particularly those of developing countries, in the assessment of global commodity patterns and prospects and in the improved international co-ordination of national policies. Full account is also being taken in these FAO commodity consultations of regional integration arrangements and plans and of their likely impact on the commodity trade of developing countries.

The FAO Conference, at its eleventh session in November 1961, stressed the importance of work in these fields and recommended the further intensification of such activities in a concerted attack on world commodity problems, with special reference to the impact of commodity trade problems on development prospects.

In any consideration of questions relating to commodity trade, the importance of preserving or promoting fair labour standards must also be borne in mind. The ILO will continue to attach great importance to this problem.

The other principal aspect of international trade which inhibits economic development is the instability of primary commodity trade. For example, the value of trade in individual commodities has been subject to year-to-year fluctuations which have averaged about 12 per cent. Since developing countries are heavily dependent on exports of individual commodities, this high degree of instability often has severe economic repercussions. The resulting losses of foreign exchange may require the curtailment of imports, and thus seriously disrupt development plans.

Some progress has been made, through the United Nations and other international machinery, towards reaching agreement on policies

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<sup>1</sup>FAO Commodity Review 1962, Special Supplement: *Agricultural Commodities—Projections for 1970*, FAO, Rome, April 1962.

which will reduce instability or mitigate its effects. Yet the progress made to date falls far short of the needs. Based on its debates and on technical studies prepared at its request, the Commission on International Commodity Trade has sought to indicate promising avenues along which solutions to problems of instability might be found. FAO also expects to be concerned to an even greater extent than before with the problems of the prices of agricultural products.

The current efforts of the CICT in exploring a system of compensatory financing illustrate one approach. The objective of the CICT in this work has been to consider the advisability of establishing machinery within the United Nations framework which would offset the effects on countries' balances of payments of large fluctuations in commodity prices. An expert group appointed by the Secretary-General has proposed for consideration a development insurance fund to compensate countries for declines in export proceeds and thus provide greater continuity in foreign exchange income. Secretariat studies have attempted to shed further light on this question by exploring in detail the workings of such a fund, and the applicability of the compensatory mechanism proposed by the experts to international trade in particular commodities. The nature of future action in this area cannot be defined until the Economic and Social Council and the General Assembly have come to a decision regarding the possible establishment of a system of compensatory financing. However, the establishment of a development insurance fund would undoubtedly be helpful in achieving the objectives of the development decade.

In addition to these studies on compensatory finance, the CICT has on its programme of work a continuing review of measures to deal with fluctuations in primary commodity markets and to help with the stabilization of internal commodity prices. This work is also supported by technical analyses prepared by the Secretariat. The internal price instability of primary commodities impedes economic and social progress in many developing countries and its solution would also significantly help in the success of the development decade.

At the same time as efforts are directed toward finding means for mitigating the effects of instability on producing countries, continued and expanding intergovernmental efforts are needed to reduce commodity instability itself. The projections of international trade and commodity trends mentioned above should be of value in throwing light on possible long-range structural maladjustments in these markets and in calling the attention of Governments to remedial action that may be required. Within the United Nations framework, the principal action is taken by Governments, in connexion with particular primary commodities, in order to achieve, through co-operative effort on the part of producing and consuming countries, progress towards a smooth functioning of commodity markets. This type of action has in the past facilitated the conclusion under United Nations auspices of international commodity agreements for olive oil, sugar, tin and wheat, and the

formation of study groups for a number of minerals and agricultural commodities. The Secretariat would continue its organizational and co-ordinating functions in the field of international commodity relations through the servicing of the CICT, ICCICA, international commodity conferences and study groups. Experience has demonstrated that the establishment of practicable international arrangements for particular commodities requires intensive preparatory work by specialized bodies, and technical support by the Secretariat at commodity conferences. Progress in this area of international co-operation is not easily put in the form of targets or even forecasts but its importance for the success of the development decade is clear.

## VI. DEVELOPMENT FINANCING

### A. Capital assistance

#### 1. THE GENERAL FRAMEWORK

If the total flow of capital and assistance to the developing countries during the development decade is to reach and maintain the level recommended by the General Assembly, i.e., 1 per cent of the national incomes of the advanced countries and these incomes are themselves expected to expand at a yearly rate of 4 to 5 per cent—it should more than double between now and 1970. This rate of increase in the flow would be less than the growth rate in recent years and it would add—depending on the definitions used—about \$4-5 billion yearly to the net flow.

Whether this amount would be sufficient or more than sufficient to attain the objectives of the development decade—indeed whether it would be necessary—would depend on what happens in the field of trade and on the degree of success of the developing countries in mobilizing internal resources. Broadly speaking, total capital formation in the developing countries also would have to be twice the present volume at least, in order to support the proposed growth rate of 5 per cent or more in their national incomes. Thus, external assistance would maintain its present share (a minority share, but crucial), but the conjectural nature of this quantitative picture must be emphasized.

How this projected increase in flows would be divided up among the various categories—private and public, bilateral and multilateral within and without the United Nations system, hard and soft, investment and pre-investment—cannot be foreseen in detail. The likeliest event perhaps is that such an increase would extend to some degree, but not the same degree, to all the various categories. Nor is it clear to what extent the increase will be through existing institutions or channels and to what extent, if any, through newly created ones.

The United Nations institutions now participating in the flow of capital and assistance are the International Bank (with its affiliates, the International Development Association and the International Finance Corporation), and the International Monetary Fund. Both the IBRD and the IMF have recently placed themselves in a position, through a significant increase in their resources, to intensify their activities during the development decade.

The International Bank and IDA expect a substantial rise in demand for their assistance as their membership grows and their members demonstrate an increasing ability to put before them soundly

conceived productive projects of high priority. The Bank and IDA together will during their 1962 fiscal year extend loans and credits to all countries of over \$1 billion, compared with a previous annual peak level of \$700 million for Bank lending.

The creation of the IDA has been the response to a situation where many developing countries were nearing the limit of their capacity to borrow abroad for development projects on conventional terms. IDA may lend at very long term and with no or low interest. In fact, all its credits thus far have been for terms of 50 years with a 10-year grace period, repayment in foreign exchange at the rate of 1 per cent of principal per annum during the first 10 years of the amortization period and at the rate of 3 per cent of principal during the remaining 30 years, and no interest. The only charge to the borrower is a service charge of  $\frac{3}{4}$  of 1 per cent on amounts actually withdrawn and outstanding, designed to cover IDA's administrative costs. Moreover, as noted earlier in this report, IDA is authorized to finance any project of high developmental priority, whether or not of a directly productive character, including projects in such fields as municipal water supply, industrial estates, technical training, education, sanitation and housing. It is already clear that the sum available to IDA for disbursement over the first five years of operations (about \$760 million) is small in relation to the needs and opportunities confronting it. The initial capital will be committed well before the expiration of the five-year period and the President of IDA has already pointed out that it will soon be necessary for member Governments to consider replenishing and substantially increasing IDA's resources. This increase in the resources of IDA is one of the primary requirements for the success of the development decade.

The IMF, although not providing long-term capital, has available over \$15 billion of resources which will be supplemented by a further \$6 billion in ten different currencies when the necessary parliamentary and other measures are taken in the coming months. These resources will continue to be available to support efforts to maintain or attain the sound financial and economic policies that are essential for growth. Over the last five years (1957-1961) drawings by countries in Latin America, Asia, the Middle East and Africa have amounted to \$2 billion or almost half the total drawings.

The United Nations system, apart from its financial agencies, concentrates on technical co-operation and pre-investment work. The sums involved in pre-investment work are large enough to be a significant element in the total flow of finance, but even so they are an insufficient index of the importance of this work in the development process. The chief sources of funds are the United Nations Special Fund and the Expanded Programme of Technical Assistance which now have annual resources of the order of magnitude of \$100 million, based on annual pledges. The General Assembly has set an immediate target of

\$150 million for these funds. As has been explained earlier in this report, the great potentialities of pre-investment work in unlocking the human and physical resources of the developing countries have only recently come to be realized. It is therefore clear that apart from the immediate increase to \$150 million, the funds dedicated to this work ought to increase faster during the development decade than the 5 per cent growth rate broadly projected for national incomes. Investment in developing countries should increase faster than their national incomes in order to make their growth self-supporting, and pre-investment should increase faster than investment in the earlier stages to take advantage of the unused potentialities in this field; and the share of the United Nations, with its special experience and advantages in this field, could well be increased and should certainly not diminish. Thus these United Nations programmes, starting from a present low level, should rise both absolutely and proportionately during the development decade. An increase in the resources available under these two programmes of at least \$25 million yearly, or 15 per cent of the \$150 million level at present set, would seem the minimum required. This would give the United Nations, at the end of the decade, resources of about \$300 million, equal to about one-fifth of the total pre-investment expenditures which have been estimated to be the minimum necessary to provide a foundation for the success of the development decade.

Although the rate of expansion of United Nations pre-investment assistance necessary during the development decade has been discussed in terms of the Special Fund and the Expanded Programme, both financed from extra-budgetary pledges, it must not be forgotten that the funds available for technical co-operation work, through the regular budgets of the organizations concerned, are an essential source of financing the necessary research and supporting services for the work. Regular budget funds available for technical co-operation provide an indispensable element of speed, flexibility, planning and adjustment to specific problems. Assistance to newly independent countries is an example of the way in which these funds can be used. The United Nations system as a whole should therefore be able to count on a parallel expansion of regular funds for economic and social work for the intensified action programme of the development decade.

Some of the special programmes undertaken by the United Nations are closely related to economic and social development. It is clear, for example, that the work of UNICEF will acquire added importance because of the proposed emphasis on the younger generation.

The \$100 million United Nations FAO World Food Programme established for the next three years cannot be included in any projections since no experience has as yet been gathered under it. Its extension and expansion is, however, contemplated among the possibilities for action which follow.

## 2. THE ROLE OF THE UNITED NATIONS

Ways and means should be found of ensuring close contact among all the agencies interested in questions of development financing and surveys, and in such other questions as inflation, balance of payments, and fiscal and related issues. This raises questions, in the first place, of the work of the Economic and Social Council to which the Charter assigns a co-ordinating role, and secondly of the co-ordination of pre-investment work and financing.

The Economic and Social Council reviews annually the flow of international funds to developing countries. Action might well be taken to make such reviews more meaningful, through periodic analyses of the problems involved. Among the questions which might be so reviewed could be a determination of the international capital and aid requirements of the developing countries as a whole; the appraisal of current levels and patterns of aid and capital flows; the study of general factors limiting the flow of funds to developing countries; and, above all, recommendations for co-ordinated action to reduce such limiting factors and to accelerate the flow of capital and assistance. A review based on such analyses would provide a method whereby availabilities and needs could be evaluated on a global scale, suggestions made to bring the needs and the availability side of the international development accounts into better balance, and the problems facing donor and recipient countries considered in juxtaposition. The periodic formulation of development assistance goals could be of substantial value in mobilizing international efforts and facilitating a systematic and co-ordinated approach in providing international aid.

The clarification of such problems through the Economic and Social Council could help materially in providing a steady flow of funds through the development of flexible patterns of assistance. In the event of progress in the direction of world disarmament, the Council could systematically consider detailed ways and means of ensuring the most effective use of the resources thus released so as to accelerate economic development. The Council would be in a position to evaluate the implications of trade developments in relation to capital flows and aid requirements. In this way, it may be hoped that progress would be made towards the reconciliation of policies relating to trade and aid, which now are frequently contradictory and conflicting. In the sphere of foreign private investment, the Council could, through discussion and technical studies, find ways of reconciling the interests of foreign investors and recipient countries so as to achieve an expanded flow of private funds. Member Governments may wish to consider the ways in which the Economic and Social Council can best discharge these functions.

In order to provide a basis for evaluating the adequacy of current levels of capital flows in relation to present and future requirements the Secretariat would continue, and if possible speed up, its current

review and analyses of the flows of long-term public and private funds. A further study which might be undertaken in the field of international capital movements and assistance is suggested by the generally recognized need for improvement of the concepts and methodology underlying the quantitative estimates at present available. Research aimed at bringing about these improvements would help to provide a firmer factual foundation for efforts to accelerate the flow of assistance to developing countries.

### 3. CO-ORDINATION OF PRE-INVESTMENT WORK WITH FINANCING

The desirability of closely co-ordinating technical assistance and pre-investment work with financing will become increasingly apparent during the development decade, as both types of assistance are intensified. Indeed, such closer co-ordination will be essential if the objectives of the decade are to be achieved. The International Bank, as the principal development financing institution of the United Nations system and an active source of technical assistance, has over the years worked well and fruitfully with the United Nations and with the specialized agencies toward the common objectives of raising living standards in the less developed countries and setting them on the road to self-sustaining growth. The United Nations and the specialized agencies, in particular the ILO, FAO, UNESCO and WHO, have co-operated with the Bank in its survey mission activities, nominating specialist members of the missions from their own staffs or helping to recruit them elsewhere. Headquarters staff of the United Nations and the agencies have briefed Bank mission members on their way to the field and have commented upon preliminary drafts of mission reports. Similarly, the IBRD has briefed United Nations staff going out to the field or already there. A number of agricultural missions have gone out under the joint sponsorship of FAO and the IBRD.

Similar relationships have been established between IDA financing and the technical assistance and pre-investment activities of the United Nations and the specialized agencies. As IDA continues to grow and, in particular, as its financing expands into areas with which other specialized agencies are concerned—education and industrial estates, for example—its contacts and co-operation with those agencies will become correspondingly more frequent and closer.

The International Bank and the United Nations have for a number of years exchanged information and co-ordinated their technical assistance and other developmental activities through an informal liaison committee. This committee was given formal status shortly after IDA came into existence and IDA was brought within the purview of the committee's work. Close co-operation prevails between the Special Fund and the Bank, and the latter has helped to formulate several proposals for pre-investment surveys which were thereafter financed by the Special Fund. The Bank has served or is now serving as Executing Agency

for a number of Special Fund projects in Latin America, Africa and Asia. Co-ordination of pre-investment work with financing also requires that all opportunities for investment identified through pre-investment work should promptly be brought to the attention of financing agencies.

With the projected intensification of action by all the members of the United Nations family, the opportunities for closer relationship among them will inevitably increase. All have, in one way or another, expressed their wish and their determination to make the most of these opportunities as they occur.

#### 4. POSSIBILITIES FOR NEW CHANNELS OF UNITED NATIONS FINANCING DURING THE DEVELOPMENT DECADE

The possibility has been foreseen that as the total flow of capital and assistance to the developing countries expands, the multilateral flow through the United Nations may share in this increase, and some part of this increase in turn may be through new channels, in addition to the projected increase in the present activities of existing financial agencies, and particularly the IDA. In what follows, seven such possible developments are listed. In the nature of things, not all these possibilities could conceivably be put forward simultaneously as definite proposals. Rather, the list shows that many possibilities exist once the desirability of new channels for intensified action has been accepted by Member Governments. Beyond that, it is felt that one or more of these possibilities may be selected for early action and others for intensive study.

##### (i) *Expansion of IDA*

The importance of a substantial expansion of IDA as a primary requisite for the success of the development decade has already been mentioned.

IDA was created after many years of discussion in particular within the United Nations, concerning the need to assure a continuing flow of development finance to those countries which, for reasons beyond their control, are unable to raise sufficient finance abroad on conventional terms. The need for development finance on "lenient" terms is greater than ever. There has been in recent years a welcome increase in the number of countries prepared to contribute significant amounts of development aid, but unless a greater proportion of the increased volume of aid is offered on lenient terms, the developing countries may not be able to accept it save at the risk of endangering the process of orderly growth which the aid is in fact intended to encourage.

IDA has not only the greatest possible freedom to design its financing terms to meet the circumstances of actual cases, but it also has great latitude in selecting projects for financing. As has been pointed

out earlier in this report, IDA's authority extends to the whole range of projects and fields with which the development decade will be concerned. As the technical assistance and pre-investment activity of the United Nations system accelerates, the volume of sound and well-prepared priority projects coming before IDA will increase and the projects can be expected to be broader in scope.

Finally, it should be noted that an enlargement of IDA's resources calls for no new international machinery and indeed implies a minimum of administrative costs, for IDA is an affiliate of the International Bank, and has no separate officers or staff of its own.

(ii) *Enlargement of the United Nations Special Fund*

In 1957, the General Assembly, while creating the Special Fund, decided that it would review the Fund's scope and future activities as soon as it considered that the resources prospectively available were sufficient to enable the Fund to enter the field of capital development. As has often been pointed out, this alternative of enlarging the Special Fund involves no new machinery. In addition, it might make possible direct integration of investment and pre-investment work and meet the wishes of many less developed countries to play a weighty role in policy decisions on the rendering of assistance, similar to that which they already play in the Governing Council in respect to pre-investment projects. Of course, care would have to be taken that the pre-investment work of the Special Fund, which has already demonstrated its great value, should not be adversely affected; in particular, this would require not only financial resources but also staff additional to that required for the Fund's pre-investment purposes.

(iii) *Establishment of a United Nations capital development fund*

During the past decade, efforts were made to set up a capital development fund within the United Nations. This project has the support of the great majority of United Nations Members, but it has not yet been possible to attract the minimum resources regarded as a necessary prerequisite for its establishment. In 1960, the General Assembly voted in principle to establish the fund and set up a committee to prepare its statutes; the draft statute prepared by this committee is expected to be before the Council at its present session. However, the necessary resources for this fund are still not in sight. At the time of writing, the preparatory committee had still to take several important decisions regarding the fund's nature, e.g., whether it would make grants or loans or both, and whether it would have its own legislative organs or use those of the United Nations. A United Nations capital development fund, if created, could perhaps address itself to some of the needs which have been discussed in this report.

(iv) *Ad hoc financing on a multilateral basis*

The possibility of providing bilateral aid under multilateral auspices ("grey aid") has been referred to earlier, and the Mekong River Project mentioned as an illustration. Other examples are the consortia for India and Pakistan and the Indus Basin Development Fund, all under the auspices of the International Bank. This method of providing assistance has been employed in the Colombo Plan, and Argentina suggested in 1957 that it might be more generally applied. This latter proposal provided that once a project had been approved by a "small organization under the Economic and Social Council", an effort would be made to find a Government or Governments willing to lend it financial support.

(v) *African development bank*

The United Nations Economic Commission for Africa has been the forum for developing a proposal to establish an African development bank which would work through, or in close relation with, national development banks and also serve to finance projects of interest to several countries. This proposal is at present under detailed study and discussion. No conjecture can be ventured about the eventual outcome, and the desirability and feasibility of the proposal await determination. However, if the discussions bear fruit, the result might well be an intensified role for the United Nations in development financing in a crucial region.

(vi) *Aid in terms of physical commodities*

The General Assembly resolution establishing the World Food Programme represents an experimental extension of the idea of multilateral aid in terms of physical commodities. As the resolution makes clear, this is not a substitute for bilateral food aid agreements or for multilateral or bilateral financial aid. In addition to the description of the programme as "experimental"—leaving open until the general review of the programme provided for 1965 the possibility of subsequent expansion or modification in the light of operating experience—the resolution contains other forward-looking elements in that it provides for expert studies which would aid in the consideration of the future development of multilateral food programmes, and expresses the hope that the possibility and advisability of increasing the programme may be considered. The resolution provides for pilot projects involving the use of food as an aid to economic and social development, particularly related to labour-intensive projects and rural welfare. The forward-looking nature of this programme was also emphasized by the Acting Secretary-General when he stated that it "contains the seeds of something greater... It will be helpful if the advanced countries come to think more about the possibilities of bringing their surplus resources and capacities to bear upon the promotion of development in the less ad-

vanced countries. At the same time, aid conceived of in the concrete form of commodities may help the under-developed countries to discover for themselves constructive uses, and pre-conditions for the effective use, of such aid, which otherwise might have remained concealed by the financial calculus".<sup>1</sup> In this connexion, it is pertinent to recall the great resources and capacities now absorbed by armaments that would be set free by disarmament. As is clearly shown in the report of the Consultative Group on the Economic and Social Consequences of Disarmament,<sup>2</sup> some of these resources and capacities could be of quite particular value in the development of under-developed countries. The whole area of supplementary aid in the form of surplus commodities and the utilization of surplus capacity is worthy of further exploration within the United Nations, where equal weight will be given to the legitimate protection of commercial trade and the interests of producers in the developing countries, as well as to the inherent potential of such aid for speeding development.

(vii) *Aid for natural disasters*

The World Food Programme is intended also to contribute to solving a problem which has severe consequences for under-developed countries, namely that of natural disasters, such as earthquakes, hurricanes and floods. The damage resulting from such disasters is often of extreme severity in terms of the human and economic loss incurred, as recent heavy floods in East Africa and the earlier earthquakes in Chile and Morocco have demonstrated. In the more severe cases development plans may have to be substantially curtailed or revised. At present the international community endeavours to help in these disasters partly through the Red Cross and partly by the provision of food, medicaments and other supplies through FAO, WHO, and UNICEF. Such assistance is largely concentrated on the emergency phase, that is to say the weeks immediately following a disaster. The need for additional international action arises mainly at the subsequent stage of planning economic reconstruction. Preparation for such action through the United Nations system is another task to which efforts might fruitfully be devoted in the development decade.

**B. Foreign private investment for economic development**

As the development decade progresses, it may be expected that the number of developing countries potentially able to attract foreign private capital will rise. Pre-investment work, governmental, international, bilateral and private, is being undertaken to uncover new physical resources and activate latent human resources. The emphasis placed by many under-developed countries on industrialization, as well

<sup>1</sup> *Statement to the Second Committee of the General Assembly on 8 December 1961*, document A/C.2/L.624.

<sup>2</sup> United Nations publication, Sales No.: 62.IX.1.

as general success in the endeavours of the development decade, also are all likely to lead to new opportunities for foreign private capital in the manufacturing sector. If the targets set by the General Assembly for increased assistance are to be met, a substantial expansion of private capital flows will unquestionably be necessary.

Within the United Nations system, the IFC, an affiliate of the International Bank, assists private industrial development, without government guarantee. Its charter originally prohibited the IFC from investing in capital stock or shares (equity) but experience showed that this restriction seriously hampered operations, and particularly the IFC's ability to attract private capital participation in its investments. Accordingly, the management of the IFC proposed a charter amendment, which was approved in September 1961, enabling it to make equity investments and to underwrite share issues. Three equity investments have already been made under this new authority. IFC is also actively studying the possibility of joining with local institutions in sponsoring offerings of industrial securities to the general public. The International Bank itself borrows from private investors, through the sale of Bank bonds, a large proportion of the funds it loans; the process serves to mobilize private capital for development investment. Another technique serving the same purpose is the sale to other investors of parts of the Bank's loans to its member countries. These sales of Bank loans, for the most part to private investors, have mounted steadily in the last six years and have by now exceeded \$1 billion, with all but \$69 million sold without the Bank's guarantee. The Bank has also helped to mobilize foreign private investment for the developing countries by taking an active part in the formation of, and helping to finance, development banks owned wholly or predominantly by private investors, both local and foreign.

The contribution that foreign private investment can make to economic development has come to be recognized by an increasing number of developing countries, many of which indicate, in their development plans and investment laws, the role foreseen for foreign private capital. The scope given to foreign private investment varies between countries.

Foreign business investment is, potentially, a major source of technical assistance and information—not only regarding particular manufacturing processes and techniques, but also for the development of managerial and marketing skills. Recognition of this fact has led to the development of various contractual arrangements for the transfer of knowledge, including licence agreements, technical services agreements, engineering and construction contracts, management contracts and agreements for the exploitation of mineral resources. These arrangements may or may not be accompanied by capital investment from the foreign partner, either in the form of equity or of a loan to purchase equipment and materials.

But there are also many difficulties in the way of effectively mobilizing an increasing flow of foreign private capital for economic development. Among them are obstacles inherent in the state of under-development, such as a lack of the necessary supporting infrastructure (power supplies, transport, etc.), lack of skilled labour and lack of developed markets. Historically, there are also political difficulties on both sides. Under-developed countries fear interference by foreign business interests, and investors fear the consequences of political instability, balance of payments difficulties, and the absence of an institutional structure and policies in which the role of business is clearly established.

A wide range of measures to promote the international flow of private capital has been adopted by both the developing countries themselves and countries seeking to facilitate the foreign operations of their industries.

These measures have been the subject of a number of United Nations resolutions and reports. Two such measures seem to offer special scope for intensified United Nations assistance during the development decade. They are the following:

1. THE PROVISION OF INFORMATION ON INVESTMENT OPPORTUNITIES AND CONDITIONS

Several under-developed countries have established investment information centres both at home and abroad. The chief functions of those centres are to inform interested investors and business enterprises in the developed countries regarding conditions, regulations and opportunities in the country in question, and to facilitate contacts with interested government agencies or potential domestic private partners. Some of the centres (e.g. the Jamaica Industrial Development Corporation, with offices in London, New York and Toronto) go beyond these tasks of information and liaison, and will co-operate actively in the establishment of foreign financed enterprises by participating in preliminary planning and surveying, building factories, screening and training workers and even helping to finance the enterprise.

A number of the development banks and corporations established in under-developed countries are also playing an active role in attracting foreign private investment, by bringing promising new investment opportunities to the attention of private businessmen abroad and by helping domestic firms to make contact with potential foreign sources of finance. As already noted, some development banks and corporations are themselves financed, in part, with foreign private capital.

In many under-developed countries there may be scope for the establishment or expansion of similar facilities, designed primarily to provide domestic private investors with information on foreign sources of finance and technical assistance, and to assist them, as required, in

pre-investment and preliminary planning activities including the preparation of project reports and feasibility studies in forms appropriate for use in negotiations with foreign firms.

The main task envisaged for the United Nations system in connexion with such institutions would be to provide, on governmental request, technical assistance in their establishment and the development of their pre-investment and planning services. Within the United Nations system considerable experience in this field already exists, and the organizations concerned stand ready to continue and intensify their help.

## 2. THE PROTECTION OF PRIVATE FOREIGN INVESTMENTS AGAINST NON-BUSINESS RISKS

A number of countries have taken measures to overcome the apprehensions of foreign investors concerning non-business risks, including nationalization or confiscation, the non-convertibility of profits and of the principal of the investment, and violence, unrest and war. These measures may relate not only to direct investments and loan capital, but also to patents and technical knowledge made available to enterprises in foreign countries. Assurances to overcome these apprehensions may be provided through authoritative policy statements, through guarantees incorporated in investment laws, and through commitments incorporated in international treaties with capital-supplying countries or in concession agreements with individual firms.

In all these cases the value of the assurance, and in effect the weight of the apprehension itself, will depend to a considerable extent on the stability of the government of the country offering the assurance and on the underlying political and institutional framework. A development plan clearly setting out, *inter alia*, the role envisaged for the private investor may form an element of this framework. So will the development of a modern commercial, financial, administrative, legal and institutional structure, which can greatly reduce the area of uncertainty in carrying on foreign business operations. The value of unilateral assurances and guarantees also increases with time, if the commitments are strictly observed.

In addition to these assurances proffered by under-developed countries, a few capital-supplying countries—the Federal Republic of Germany, Japan and the United States—offer guarantee or insurance to their investors establishing enterprises in developing countries, provided that, in principle, the latter have entered into supporting agreements with the insuring government (except under the Japanese scheme, which is unconditional in this respect). While the Japanese insurance scheme is limited to equity investments, the other two cover loan capital and, in the case of the United States scheme, also patents, technical information, and so on. A much larger number of capital-

supplying countries offer credit insurance to their exporters, some of them for terms up to twenty years to facilitate exports of capital equipment.

The limited scope and geographical coverage of the existing investment insurance schemes have led to the formulation of a number of private proposals for a multilateral investment guarantee scheme. The International Bank has recently published a study identifying and discussing the principal issues. The study takes no position for or against the desirability or feasibility of such a plan. It was undertaken in the belief that an analysis of the issues might be useful both to Governments and to private interests in further consideration of the subject.

Related proposals to establish an independent international forum for the conciliation and arbitration of disputes involving foreign private investors and Governments, possibly within the framework of the United Nations system, have also been widely discussed. There is no doubt that effective methods of settling disputes would help to improve the investment climate and thus promote the flow of private foreign capital. The proposals have been examined in detail in recent Secretariat reports, and a Secretariat enquiry among Member Governments revealed widespread interest in the subject. On parallel lines, the International Bank has on several occasions been asked to assist in the settlement of disputes involving foreign private investors and governments, and is currently exploring with its member countries what might be done to promote the establishment of appropriate arrangements to this end.

### **C. Facilitating access to foreign sources of development capital**

While the needs of developing countries for foreign assistance in the financing of their development programmes are expanding, resources available for meeting these needs are limited and are proffered by a complex variety of public and private, national and international institutions, through a multiplicity of channels and techniques and in different forms. It is to this situation that General Assembly resolution 1715 (XVI) on the United Nations development decade is addressed. The resolution "requests the Special Fund, following consultations with participating Governments but not later than June 1962, to consider the desirability of establishing a service to provide developing countries upon request with information and guidance concerning the policies, rules, regulations and practices of existing and future sources of development capital and assistance necessary to enable the less developed countries to determine for themselves the most appropriate sources to which they may turn for assistance as needed".

This suggests the expansion and systematization of existing United Nations services in this field so as to collect, analyse and make gen-

erally available to developing countries an up-to-date stream of information on the basis of which public and private agencies in these countries can be assisted in determining how to make the best use of such sources of finance, and in particular in identifying and preparing projects in a form suitable for use in negotiations with potential foreign sources of capital assistance. These services would seem to consist mainly of the provision of information, guidance and training.

### (i) *Information*

To provide the relevant information on the more comprehensive basis contemplated in the resolution, a collection of the statutes, regulations, loan agreement forms and other documents of all major institutions concerned might be organized in a legislative reference service. Such a service would also provide information on major capital markets and their procedures for the floating of loan issues by developing countries. Also covered would be the expanding range of investment laws and treaties which attract the flow of foreign private capital to developing countries in a variety of ways, including tax and other incentives and assurances and guarantees against major business and non-business risks.

This material is now widely dispersed and subject to constant change, so that the publication of authoritative information in a periodically up-dated manual would serve a clear need. This information could be made available to interested governments of developing countries through their financial agencies, which would be kept supplied with basic working and reference material.

### (ii) *Guidance*

In seeking foreign financing, there is need not only for knowledge and understanding of the methods and policies of the various sources from which financing could be secured, but also for a high degree of experience and skill in formulating and presenting development projects in bankable terms, in weighing recourse to foreign and domestic sources of finance, and in selecting the most appropriate forms of financing. It also requires considerable expertise in developing the requisite institutional and legislative framework for the operations of the projects for which foreign financing is sought.

The International Bank has been active in helping its members to identify, select and prepare development projects for financing, both in the course of its regular lending operations and through the medium of the project studies mentioned earlier in this report. The demands for this type of assistance have been increasing and it is likely that there will also be an increase in requests for similar assistance addressed to the United Nations itself. To facilitate compliance with these requests, there might be established a roster of experts—technical, financial

and administrative—of recognized ability and authority, who have expressed a willingness in principle, and subject to other demands for their services, to serve from time to time on short-term missions or to participate in work of the Secretariat.

(iii) *Training*

While specialists of the type to be included in the proposed roster can assist Governments on an *ad hoc* basis in the study and presentation of projects, such tasks must be performed on a continuing basis by qualified government officials. The experience of the International Bank with its Economic Development Institute and in its general and special training programmes indicates that governments welcome opportunities for expanding training facilities in this field for selected officials. Training in the drafting of appropriate legislation and in the design of the requisite institutional framework is likewise needed. It would be highly desirable to explore the possibility of appropriate arrangements with the major international and national institutions providing development finance, so that their expertise, as well as that of the specialists on the above-mentioned roster, might be drawn upon.

## **VII. TECHNICAL CO-OPERATION AND OTHER AIDS TO DEVELOPMENT AND PLANNING**

### **A. The transfer of knowledge**

Technical co-operation can no longer be regarded merely as a transfer of existing techniques from the developed countries but must be understood as a more complex process involving the adaptation of techniques and methods to the special circumstances of the developing countries. The achievement of this type of technical assistance will require far greater co-ordination between research and operational services. It will also depend on the development of new knowledge, with all efforts aiming at development to be made in full awareness of the great difference in basic conditions between the countries that are, and those that are not yet, economically advanced.

The developing countries cannot follow the pattern of growth that occurred in the countries now industrialized, for they have inherited the labour-saving technology and the new techniques and processes which have been developed elsewhere. The developing countries now confront a vast array of technologies from which they can, theoretically, choose those which would meet their needs most adequately.

Unfortunately, full advantage has not been taken of this theoretical possibility. The developing countries have not been able to use the available information efficiently largely because they are lacking in the broadly based education necessary for them to do so. In order to keep up with the pressure of events, they have tended to take over parts of the structure of the industrialized countries without a full understanding of how it will affect them.

In the years following the Second World War it has generally been recognized in the advanced countries that the new techniques of research and development, coupled with the new resources made available by science and technology, will allow the solution of most problems. In fact, through regular expenditures within a going system of research and development, progress has become, as it were, an "industry" with almost predictable outputs, and growth has been built into the society. However, while research and development expenditures have soared in the industrialized countries, too little effort has been directed to the developing countries of the world, though it would not seem that this is due to the peculiar difficulties involved.

It is already evident that the problems involved in the use of solar power or the desalinization of water could be solved by a major research programme adequately financed. The United Nations has

steadily increased its activity in these two areas in recognition of this situation.

Under General Assembly resolution 1260 (XIII), the Secretary-General of the United Nations and the Director-General of UNESCO arranged for a survey to be carried out on the current trends of inquiry in the natural sciences and on the steps which might be taken to encourage the concentration of efforts on the most urgent problems; the Economic and Social Council at its present session has before it reports from the various agencies on the priorities for action on the recommendations of this survey. A United Nations Scientific Advisory Committee has been established and on its suggestion a United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Nations will be held in 1963. This conference will explore recent advances in the application of science and technology which will benefit the less developed areas, provide an opportunity for an assessment of the impact of such applications on the processes of economic and social development, reveal opportunities for research directed toward producing new scientific and technological advances of special utility to less developed areas, and stimulate and promote scientific and technological development in the less developed areas. The general theme of the conference will be the challenging opportunities for accelerating economic development through the more effective application of existing science and technology and through research specifically designed to produce new applications of special interest to less developed countries.

The major barrier to the utilization of such challenging opportunities, apart from the will to give the problems of the developing countries reasonable priority, is the shortage of qualified personnel both in the developing and the developed countries. This shortage of trained people is particularly acute in scientific subjects. New methods must be found to educate and train larger numbers of people in these disciplines. The subject of education and training has been discussed elsewhere in this report, but there are certain points which deserve specific mention in this connexion. The problems are, in fact, particularly crucial both because of the extreme shortage of personnel and also because of the need for special, and often expensive, equipment. It must, therefore, be expected that a particularly large proportion of scientists must be trained abroad, at least in the short run. In order to meet this situation, UNESCO is placing major emphasis on the building up of national and regional universities and technical colleges. In addition, the advanced countries should take account of the needs of the developing countries when they make projections of the needs for certain skills.

Some way must also be found of providing stronger ties between scientists and scientific and technological institutions in the developing and advanced countries. There is a need for further efforts to identify

the new potentials being opened up by science and technology and to collect and disseminate this information. Stronger links between scientific foundations and organizations in all areas of the world are needed to allow more effective technical co-operation as well as more funds for this purpose.

The scientific community of the whole world must be more closely related. At the present time, the scientist in the developing countries is all too often cut off from the main stream of thought, and it is thus extremely difficult for him to make a major contribution, for while the complexity and breadth of scientific knowledge require an ever increasing degree of specialization, the very extent of this specialization at the same time demands increasing cross-fertilization between apparently unrelated disciplines. The creation of a world-wide scientific community would help to solve these problems. Unless steps to achieve this end are taken, the present outflow of trained individuals from the developing countries must be expected to continue.

It seems quite clear that part of the failure to devote more resources to the needs of the developing countries is due to a lack of understanding of the particular problems which require solution. New methods must be found to produce the necessary link between the research *problems* of the developing countries and the research *possibilities* of the industrialized countries. UNESCO will, during the decade, help countries to define their scientific policies and establish and strengthen their national science councils and departments, in accordance with its 10-year science plan. Further, it will provide advisory and consultative services, during this period, to Member States to develop their national activities in the fields of international relations and exchanges in the field of education, science and culture.

### **B. Technical co-operation**

Technical co-operation is one of the most important tools, if not the chief tool, available to the United Nations for the furtherance of the objectives of the development decade. A number of proposals for new areas of activity for technical co-operation, and for modifications and expansions of existing programmes, are made elsewhere in this report: the purpose of the present section is to enumerate some of the key approaches which should determine the growth of technical assistance activities of the United Nations system during the development decade.

At the same time it should be recognized that the organizations participating in the United Nations Expanded Programme of Technical Assistance also need to increase existing types of technical co-operation activities along the lines which have been developed in the past decade. During this period, a substantial number of urgent and well conceived requests from governments could not be met owing to the limitation of financial resources.

If technical assistance furnished by the United Nations system is to make its maximum contribution to the decade, it must be thoroughly co-ordinated with development planning, and correspondingly placed on a long-term programming basis. But it must simultaneously retain flexibility regarding individual experts and projects, and also for the unavoidable and, in fact, essential *ad hoc* action, especially in newly independent countries. Underlying most of the points which follow is the concept of technical co-operation as a long-term, continuing activity, the ultimate purpose of which is to bring developmental activities and projects to the point where nationals of the country requesting assistance can take over. The function of technical co-operation in the sphere of the development of human and physical resources is analagous to that of pre-investment in the sphere of economic development.

*New directions in the organization of technical assistance activities within the United Nations system*

(i) A significant development of the last few years has been the growing participation of the substantive staff at Headquarters, in the regional commissions and in the specialized agencies in technical assistance activities. The tendency of substantive research and operational services to merge is facilitating the application of the results of research to practical problems and, conversely, is helping to determine the lines along which research can usefully develop.

(ii) Following the recommendations of the General Assembly regarding the decentralization of the economic and social activities of the United Nations and the strengthening of the regional economic commissions, the functions of the commissions in providing substantive support to various technical assistance projects and in carrying out administrative tasks will be developed. The appointment of regional advisers, who are based on the regional commissions or on the regional offices of the specialized agencies, and whose services can be made available simultaneously to a number of countries of the region, is proving an effective way of enlarging the range of services for developing countries. The present report contains a number of proposals for intensified action in this direction.

(iii) Intensified efforts will also be made to co-ordinate the activities of the United Nations with those of the specialized agencies, both at Headquarters and at regional and national levels. The aim is not merely to avoid duplication of effort, but to bring to bear on specific problems the combined knowledge and techniques available within the United Nations system. The co-ordination of United Nations technical assistance activities with national, bilateral and other multi-lateral programmes, particularly in connexion with large regional programmes, is also essential.

(iv) A further method for the most effective utilization of the resources of the system is the employment of groups of experts to be

responsible for a particular project or sector, covering all the relevant fields in which external assistance is requested. This method is potentially particularly valuable in the field of national development planning, but is also proving useful in giving assistance in, for example, the preparation of national statistical or demographic surveys, the exploration of natural resources, and community development. If such groups are based in regional commissions, they serve the simultaneous purpose of strengthening the work of the commissions and bringing them and the specialized agencies together.

(v) The implementation of development plans requires an effective administrative system and the establishment of an institutional framework within which increasingly complex activities can be organized. In many of the newly independent countries, in particular, an adequate number of public administrators and an adequate institutional basis for national development are both lacking. An important task for the development decade is to expand technical assistance, and the OPEX programme, in these areas.

(vi) The recommendations of many technical assistance experts emphasize the importance of establishing facilities for the training of local personnel for implementation of projects. Countries are assigning high priority to training, on lines discussed in an earlier chapter, often with assistance from the United Nations system. A wide range of regional training facilities is also being developed in such fields as statistics, public administration, housing and physical planning, education, demography, rehabilitation, nutrition, child welfare and others.

(vii) There is also increasing recognition in many areas of the need to institutionalize technical assistance programmes, especially at the regional level. The emphasis on regional institutions is dictated partly by the general desirability of intensified inter-regional co-operation and partly by such practical considerations as the small absorptive capacities and slender resources of finance and personnel of many individual countries. The recent establishment of regional economic development institutes and the various institutes of public administration, statistics and demography might be supplemented by similar institutions dealing with natural resources, industrial development and agrarian reform.

### **C. Estimate of pre-investment needs**

During the decade of the fifties, experience gradually led to a realization of the crucial role played by pre-investment activities in the development process. This role can be described as creating or revealing new investment opportunities. Economic growth cannot be achieved by making just one of the scarce production factors (usually capital) available in a larger amount to a developing country. What is required is the greater availability of *all* production factors (natural resources, skills of all kinds, knowledge and planning) and the knowledge of

where and how to combine them in actual production processes. It is the task and purpose of pre-investment activities to make possible such combinations, and thus create the conditions for successful investment.

Some technical assistance projects could as well be designated pre-investment projects, and the borderline between these two fields is not always quite clear. In estimating requirements, they had best therefore be considered together, as "pre-investment". Any estimate must necessarily be subject to many uncertainties. Nevertheless, a rough indication of the order of magnitude can be given.

The need for pre-investment work is related more or less closely to the capital investment which is required in order to meet the targets set for the development decade. This does not imply that pre-investment work should necessarily be limited to such projects as are part of the new investment targets; it would be hard to indicate an upper limit to useful pre-investment activities in developing countries. However, the resources for pre-investment as well as for investment itself being scarce, they should be distributed over both activities in such a way that a maximum contribution is made to the economic development process. Hence, estimates may be prepared on the assumption of a normal and balanced relationship to be maintained between pre-investment and investment.

The relationship between pre-investment and investment or, alternatively, between pre-investment and national income may be estimated separately for the various elements of pre-investment work. Thus, empirical evidence has shown that high-level manpower formation in a progressive economy will absorb as a rule about 3 per cent of total investment. Another study has suggested that developing countries as a whole will have to spend on this type of pre-investment about one-half of 1 per cent of their national incomes. At an investment level of 15 to 17 per cent of the national income (corresponding roughly to the growth target for the development decade) these two estimates would coincide. Similarly, the cost of reconnaissance surveys and project preparation can be put at roughly 2 per cent of total investment. More uncertainty exists as to the necessary or desirable level of expenditure on applied research. In a number of technologically advanced countries annual expenditures on non-military applied research tend to centre around 1 per cent of the national income. For the under-developed countries, however, there is no need to play, and even no immediate possibility of playing, a leading part in this field. Instead, it is their problem to adapt existing production processes to the specific conditions prevailing in under-developed countries, notably to their different relative resource endowment. This type of research is likely to be less costly. As a tentative proposition, the volume of expenditure on applied research should perhaps be of the order of magnitude of one-half of 1 per cent of the national income.

It may be broadly estimated that if the objectives of the development decade are achieved, the resulting total capital formation within

the developing countries would about double from its present figure of \$12 billion annually.

These crude and approximate figures relate to total needs for pre-investment activity from all sources. Experience of the Special Fund shows that on the average some 60 per cent of pre-investment expenditures are local costs, leaving about 40 per cent to be covered by outside means. Total external assistance required in the field of pre-investment can be very roughly estimated therefore at \$1,000 million per annum towards the end of the development decade. Tentatively it might be assumed that from bilateral or other multilateral sources about half of these amounts could be obtained. On these assumptions, the United Nations system would have to spend for pre-investment about \$250 million annually in the beginning and progressively more towards the end of the development decade. These figures, however tentative they may be, agree with the target of \$150 million set by the General Assembly for the Expanded Programme and the Special Fund, if regular programme funds are also increased.

#### **D. Other aids to development and planning**

##### **1. OPERATIONAL AND EXECUTIVE PERSONNEL PROGRAMME**

In the early years of technical assistance, the activities of experts were limited to giving professional advice in their various fields, or to teaching and professional training of a limited and specialized kind. More recently, however, countries have indicated their desire for another kind of assistance, namely experts to perform operational functions within the government, rather than merely giving advice. This demand has found expression in the United Nations programme for the provision of operational and executive personnel (OPEX). The OPEX programme provides experts of international standing, who enter the service of the receiving Government on the same conditions as its own nationals, but the United Nations makes up the difference between the local salary and the salary necessary to attract an international expert.

This phase of technical assistance was introduced in 1959 on an experimental basis and on a very modest scale. At the end of 1960, it was placed on a continuing basis, as a regular programme. Thus far it has applied only to senior appointments because the funds available are relatively small and governments naturally wish to take advantage of the arrangement to staff posts which have an important influence in their governmental structure.

The number of OPEX experts at work is expected to reach eighty by the end of 1962 (compared with 30 at the end of 1961). At the end of March 1962, there were more than 200 requests for OPEX posts which could not be met through lack of available funds and,

to some extent, through difficulties of recruitment. The demand for technical aid of this character continues to increase and the specialized agencies are beginning to introduce similar schemes for the recruitment of specialist personnel at a somewhat lower level, on similar terms to the main OPEX programme. Already UNESCO has placed over seventy such officers on duty and ICAO foresees the need for one hundred such posts in their field in the near future. FAO reports a growing demand for OPEX-type assistance to help developing countries operate their agricultural development agencies, as well as to help improve their technical services. The World Health Assembly also has under consideration the need for operational staff in the newly-independent countries. The Director-General of WHO estimates that some \$1 million will be required by the Organization if it is to render effective operational assistance in 1963.

A direct relationship between developed countries and the United Nations might be worked out. In selected instances the developed countries might agree to make up the differential between local and international scales of pay and the inducements which are needed to obtain people in large numbers. This differential is not necessarily only in terms of money, although this is likely to be important for first-rate technical personnel, but also in terms of social security rights, provisions for seniority on return, etc. The present demand for skilled manpower is so great that unless the United Nations programme is extended in some such way the demands will continue to exceed the capacity of the system to meet them. The strengthening of the career element among experts serving in OPEX posts also seems necessary.

Other ideas in the sphere of "operational" assistance worthy of further exploration are the provision of volunteer workers for service with the United Nations programme, and an extension of the principle of a volunteer corps to a similar international service of people qualified to work in under-developed countries, who would staff and support training centres in developed or under-developed countries as ancillaries to the already existing technical assistance programme.

## 2. PUBLIC ADMINISTRATION AND LOCAL GOVERNMENT

Development depends heavily on the quality of the administrative personnel available. The training and supply of the administrators needed in the public sector alone requires a tremendous effort both from the under-developed countries and from those who are anxious to assist them.

In the field of public administration itself, progress must be achieved on a broad front. If an attempt is made to reorganize one sector of the administration, neglecting the others, orderly development will become impossible. National effort and technical aid from outside must be fully and carefully integrated and co-ordinated. Thus there must be a focal point for administrative progress and reform.

In many countries this need has been met by the creation of an institute of public administration. Such an institute prescribes standards and techniques, trains individuals to greater competence and examines specific hindrances to advance. But it carries no mandatory power. Where this is needed, the force of a central organ of government, i.e., a department or commission of the public service, is required.

The countries which became independent during the 1940's had often had long periods of preparation for the change to independence, and even then the growing pains of independence were severe. The number of new countries achieving independence more recently, or likely to achieve it during the development decade, has been far greater while the preparation has been less. Much administrative re-arrangement has to be achieved in a short time, and this in countries where experienced administrators are few in number. The only long term solution is the development on a broad scale of extensive training programmes.

The administrative needs of many Governments and the special needs of the newly independent countries are probably more urgent and will take longer to meet than has hitherto generally been admitted. Thus there is no certainty that methods hitherto used will be adequate throughout the decade. A number of new avenues of progress must be explored in an effort to meet the cumulative demands of the situation.

In the past the work of the United Nations in public administration has mainly consisted of direct aid to individual countries sponsored and supported from Headquarters, although there are some notable exceptions. But the countries of a region may have more to learn from one another than from outside countries. This has already been recognized in South East Asia by the formation of the Eastern Regional Organization for Public Administration. The regional implications of problems of public administration are also being recognized by the appointment, during 1962, of regional consultants in public administration at the headquarters of Economic Commissions for Africa, Asia and the Far East and Latin America.

Successful implementation of development plans will often depend on local action and initiative. This calls for decentralization of certain powers and machinery of government. Decentralization of decisions frees national leaders from onerous details and unnecessary involvement in local issues. The form of decentralization should be designed to permit and stimulate the self-help effort of the people and their participation in programmes intended for their benefit and utilizing local sources of finance, manpower and material resources. As an example, WHO emphasizes that effective decentralization must be based on the strengthening of health administrations at the local level. Similarly FAO stresses that central and provincial government services must be available at the local level if agricultural development is to be achieved.

The United Nations has recently brought to the stage of examination by an international Working Party the results of a good deal of research and inquiry in the field of decentralization and local government and in the closely associated fields of community development and urbanization. But a broader and more intensive approach to the problem is now required.

A number of countries in Asia and Africa are experimenting with new methods of decentralization. These involve, in general terms, the transformation of field units of central or state governments into the executive arms of local authorities. In the case of India and Pakistan, activation of local authorities followed upon national programmes of community development. In other cases, the emphasis is on increasing the capability of local authorities to administer technical services, through training of staff and provision of grants-in-aid, and on effecting a gradual shift of responsibility to local authorities of those functions of central ministries which can best be administered at that level. In at least one country, consideration is being given to creating special purpose statutory bodies to administer local activities in education and certain other fields.

United Nations action can assist governments of developing countries in designing and improving their systems of decentralization. Technical advisers can aid in the design of central-local relationships and in organizing and training the staff of the central agencies which are to render services to local authorities. Operational and Executive (OPEX) personnel may also be useful where local staff is not immediately available for posts such as director of a unified civil service system for local authorities. Fellowships, regional seminars, and publications on comparative experience can be used to widen the experience of central staff providing support to local authorities and of key staff of large local authorities. The International Union of Local Authorities will soon complete a comparative study of "Central Services to Local Authorities". This study, done on behalf of the United Nations, and another on "Decentralization for National and Local Development", which is being prepared in the Secretariat, should indicate new areas for intensified action.

The experience of many United Nations experts is available through their printed reports but these studies are necessarily in terms of individual countries. There is an increasing need for analysis of this experience by means of documents of a more critical and more general character. The United Nations recently made available a *Handbook of Public Administration*<sup>1</sup> which defines and explains the principal problems involved and is to a large extent based on the experience of ten years of technical assistance in public administration. UNESCO has enlisted the services of the International Institute of Administrative Services and other learned societies in the preparation of basic

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<sup>1</sup> United Nations publication, Sales No.: 61.II.H.2.

studies. These need to be enhanced and extended by a series of basic documents with broad coverage of the various aspects of administrative organization and administrative behaviour. They will give effective and important support to training programmes.

### 3. REFORM OF TAX POLICY AND ADMINISTRATION

Countries initiating planned development efforts often have tax systems that are structurally and administratively inadequate in their productivity, the range of taxes used, their elasticity and their social and economic impact. The objective of tax reform may be defined as a tax system which will produce increasing revenues on the basis of the rising productivity which in turn it helps to promote in the economy.

For the United Nations, the main need is to create a fiscal advisory service equipped to provide upon request an evaluation of a country's entire tax system and to present comprehensive long-range recommendations for the basic reform of its structure and administration. This involves three preparatory tasks which should be undertaken simultaneously.

(i) The simplification, consolidation and codification of the entire body of tax law, so as to make its scope and content clearly intelligible to the policymaker, the administrator and the taxpayer.

(ii) The integration of all tax services into a single administration. This will serve the interchange of information, the common use of joint services, and the reduction of policy rivalries.

(iii) The measurement and analysis of the taxable capacity of the country and of the distribution of actual and projected tax burdens among the different sectors of the economy. The United Nations would greatly strengthen informed tax planning if it were to prepare tax burden distribution models and facilitate their use through regional seminars.

On the basis of such preparatory work, it will be possible to confront the main issues of tax reform:

(a) *Taxation of agriculture.* The agricultural sector, predominant in most developing countries, must provide a major share of tax revenues. It is usually composed of a very large number of taxpaying units with low taxable capacity, but there are also some of great wealth and often great political power. A primary requisite for effective tax planning in this field is the comprehensive mapping and valuation of agricultural land to provide reliable information on its nature, potentialities and legal status.<sup>2</sup> The United Nations, which has acquired considerable experience in this field, could make advanced valuation techniques available through training courses for senior valuers and the

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<sup>2</sup> Such land surveys and valuations are also essential for other than tax purposes, especially for land reform, for land consolidation and resettlement, land use planning, etc.

preparation of valuation manuals. In connexion with the initiation and implementation of agrarian reform, FAO could assist in the assessment of land values and land taxation.

The objective is to design and apply a scheme of agricultural taxation which will strengthen the progressivity of the tax system, syphon off all or part of unearned land value increments, support land reform by making excessive land holdings uneconomic, and promote higher productivity.

(b) *Local government tax problems.* Urbanization in developing countries places rising pressures on local government resources. Urban real property should be a prime source of revenues, since it benefits from unearned value increases resulting from urban development. The valuation of urban property requires techniques which are largely transferable, and for which systematic training programmes and materials could be fruitfully provided by the United Nations.

At the same time the revenue and expenditure programmes of local and regional authorities must be integrated with the national plans. This gives rise to new problems, and the United Nations faces a major task of assistance in this area.

(c) *Taxation of industry.* Industrialization can often be promoted effectively (and, from a revenue point of view, advantageously) by imposing special taxes on investments which the government wishes to discourage (e.g. land speculation, luxury construction, lending, trade and service industries). The reverse technique—broad tax concessions to new industries—is used in many developing countries, but it has serious implications for the equity and productivity of the tax system. As industrial development progresses, general tax exemptions are in any case no longer justified. At this stage, if there have been appropriate advances also in tax administration, more limited tax incentives, especially depreciation and investment allowances, may be brought into play. United Nations research and assistance must be intensified during the years to come in all these aspects of industrial taxation.

(d) *Training.* Essential to the success of United Nations support of substantive tax reform is the strengthening of training programmes in order to enable government officials engaged in tax research, legislation and administration to plan and carry out national tax reform programmes. Long-range properly planned training programmes are to be preferred. The integration of fiscal work in economic development planning will be greatly advanced by fiscal training within the emerging Regional Development Institutes. This will also make it easier for governments to release larger numbers of officials for training, and cheaper to provide it.

Since the growth of tax systems requires a steady flow of new legislative and regulatory texts, expertise in the drafting of clear and consistent instruments is essential in the translation of fiscal policy

decisions into effective tax practice. At present, tax law in developing countries is frequently rudimentary in scope and character or, sometimes, lost in excessive formalism. It should be possible to provide joint training in tax legislative drafting on a broad sub-regional or inter-regional basis. Such training may be decisive for the implementation of desirable tax policies.

(e) *Automatic data processing in the tax field.* In promoting the use of automatic data processing equipment the United Nations could make a significant contribution to more productive tax administration. This enhanced efficiency of administrative operations will encourage in appropriate cases the introduction of more advanced tax measures, e.g. modern income and wealth taxes and more progressive indirect taxes.

Perhaps more important still, the tax information thus assembled provides valuable data not only for fiscal policy but for development planning generally. The United Nations could provide facilities for practical experimentation, preferably on a regional basis, research and demonstration. They might well be combined with those proposed elsewhere for statistical purposes generally.

#### *Measuring progress in tax reform*

As part of a programme for the development decade, it will be desirable to measure the progress of tax reform. While progress in tax reform can be meaningfully measured only as part of progress in economic development as a whole, it is possible to outline briefly some useful indicators. The first indicator would be the percentage of gross national product collected in taxes. This figure, however, provides no absolute criterion for the quality of the tax system or of its enforcement, since a decrease in gross national product may, under an inelastic tax system, result in an increase in the percentage figure of tax collections.

Another important indicator is the percentage of expenditures financed by tax revenues. Here again, a reduction in needed services or a breakdown in the development programme may account for an increase wholly unrelated to improvements in the tax system. Nevertheless, as a general rule, the ability of a country to increase the tax financing of its expenditure programme is a major objective of tax reform.

The percentage of total revenue contributed by taxes on income and wealth is likely to provide a good indicator for the progressivity of the system, though it may also be affected by inflationary or deflationary shifts.

The analysis of tax burden distribution, in relation to the expenditure programme, will provide indications of the burden differentials between different sectors and groups. Such indicators, properly evaluated

and coupled with the necessary qualitative analysis, might be the basis of periodic Secretariat reviews of progress in this vital field.

#### 4. BUDGETARY REQUIREMENTS FOR DEVELOPMENT PLANNING

The budgetary systems of many developing countries have failed to keep pace with the new demands made on them by the greatly increasing scope of activity of the public sector and, in particular, by the adoption of a planned approach to economic development. Thus, the need is first for the development of new types of information on the public sector essential for drawing up long-term development plans, and second for changes in concepts and procedures in government budgeting required to make the annual budget an effective instrument for implementing the development plans and policies. The United Nations Secretariat has been instrumental in developing an economic and functional classification of government transactions. The object of such a classification is to produce, on the basis of the budget, the basic information required for development planning, and in particular to bring out more clearly the interrelationships between the government sector and the rest of the economy. As a rule, this information is supplied in addition to, rather than instead of, the presentation and maintenance of government accounts in a traditional form. This economic and functional classification is being increasingly applied by the countries in the less developed areas as well as in other parts of the world.

The changes required in the concepts and procedures in government budgeting in order to make it an effective instrument of development planning represent for most countries far reaching measures. In view of this, progress is bound to be gradual. However, the significant factor is that the Governments of many developing countries have come to recognize the urgent need for initiating basic reforms in their budget systems. Traditional budgets tend to emphasize the things the government buys rather than the things the government does. There is a need for budgetary techniques which focus attention on the objectives to be achieved and on the total costs of achieving these objectives, as well as on measuring accomplishments in real and physical terms in addition to financial terms. This represents the basic modern approach to problems of management and planning. The extension and adaptation of these techniques to the budget process constitutes in essence the management or performance approach to government budgeting.

It may also be expected that countries will increasingly seek expert assistance in applying new techniques. This assistance may usually require a team consisting of several experts for extended periods of time, rather than a single expert. Furthermore the possibility of introducing improvements in budget administration is largely dependent on the availability of personnel competent to implement them. Increased emphasis therefore will have to be given to the need for training

national administrators who are qualified to carry out these basic changes.

In the new countries of Africa particularly, one of the most urgent problems in the field of fiscal administration is the maintenance of the present services in view of the possible departure of a large number of expatriate officials. This will call for training programmes on a large scale and it is expected that the new regional planning institutes will have to play a key role in carrying out these objectives. The institutes will therefore need to be adequately staffed with budget management specialists.

#### 5. STATISTICAL REQUIREMENTS FOR THE DEVELOPMENT DECADE

The lack of basic economic and social statistics and surveys in many of the developing countries is a well-known obstacle to progress since it deprives the Governments of an adequate quantitative basis for their development plans and at the same time denies the governmental or private investor the means by which he can evaluate investment possibilities.

##### (i) *Improvement of national statistics*

The United Nations and the specialized agencies plan, as part of the development decade programme, to take further steps designed to bring countries up to a level of statistical development where they will possess the basic quantitative data without which any development plan can be little more than a qualitative conjecture. This involves the collection and compilation of bench-mark series, whether by comprehensive census or by sample survey, in the fields of population, production, consumption, external trade, prices, transport, manpower (especially skilled) and the construction of simplified national accounts for the main sectors of the economy. The resources required for this effort will necessitate an expansion of at least 75 per cent over the number of expert man-years provided under the technical co-operation programmes in recent years.

The improvement of national statistics in the developing countries must be focused first of all on the quality of the basic data and will rely principally upon the use of statistical sampling techniques. Sampling is far more economical than any other method of collecting statistics, the results are available sooner, and it makes it possible to obtain results of only the necessary accuracy. Sampling techniques are being promoted in all of the regions through working groups, and assistance is given in establishing statistical sampling units in the government services. In agricultural statistics, because of the dispersal of production and the illiteracy of most farmers, special techniques must be developed to provide the necessary yardsticks and measurements.

Strong efforts are being made to promote the 1963 world census of industry and to secure adequate and purposeful tabulations. This

activity could lead to considerable expansion in the statistics on industrial progress and the interrelations and changes in the patterns of industrial development. A new round of censuses will be undertaken in the years adjacent to 1970, and the United Nations system must be prepared to assist countries in the formulation and improvement of census plans. Pilot projects and other means to indicate the methods and importance of adequate statistics should be established. A number of specific proposals for work shops, pilot projects, and conferences, are envisaged, together with the preparation of manuals and handbooks dealing with statistical concepts and methods.

(ii) *Regional adaptation and organization*

The proposed regional adaptations for this programme may be illustrated by the statistical survey of Africa. This activity consists of consultations with each country on the statistics most needed for its development schemes, thus permitting the national statisticians to concentrate their resources on those aspects which are most important for immediate purposes. Similar activities are in progress in Asia and in Latin America.

The system of regional statisticians has already proved its worth. The regional statistician is able to assist Member States of the region on an *ad hoc* basis with respect to the statistical programme of the country and, frequently, to arrange for assistance to carry on the programme. The use of regional statistical advisers financed under the technical co-operation programmes of the United Nations has proved to be an effective supplement to the services of the regional statisticians. The United Nations alone envisages that in each of the three regional economic commissions specifically covering less developed regions a minimum of five regional advisers, in addition to the regional statistician, will be required. Similarly, ILO, FAO, UNESCO and WHO plan to increase the number of their statisticians working in the region, in close co-operation with the United Nations as appropriate. A mechanism also exists for the convening of working groups on particular statistical problems. The need for regional machinery in dealing with more specialized statistical fields is strongly felt in various quarters. For example, special commissions for food and agricultural statistics are being set up in Africa and the Near East and are under consideration for other under-developed regions.

In a number of instances, it has been found that countries require not only advice in the development of their statistical systems, but also external assistance of a material nature. For example, statistical machines, office supplies and equipment, and transport equipment, are required. The total technical co-operation programme must envisage support of the kind mentioned during the development decade. This can be provided with the support of the Special Fund. For example, it is planned to establish regional research and training institutes for agricultural statistics in the four major under-developed regions.

Middle level training in statistical concepts and methods should be very substantially increased. This is especially true in Africa and in newly emerging countries in other regions. Substantial progress has been made in organizing training centres for middle level personnel in Africa, but this activity needs at least to be doubled in the next few years. An urgent need with respect to training activities concerns the further education, at the university level, of qualified personnel. As far as Africa is concerned, efforts are now under way to establish satisfactory university courses in these subjects in African universities.

(iii) *Demographic studies*

Development planning is also hampered in the majority of developing countries by the lack of an adequate foundation of basic demographic research. Among the most obvious requirements in this connexion is an adequate series of population and manpower projections for each country, urban and rural sectors, major cities, and principal administrative divisions. Sound projections depend upon studies of the trends of fertility, mortality, migration, population structure and distribution, and of the factors influencing these trends in each country.

In addition, national studies of the interrelation of population trends with the factors of economic growth and social development are needed as a part of the basis for decisions with regard to national population policy and its part in the strategy of development. If the Government decides, in the light of the results of such studies and other considerations, that it would be in the national interest to make an effort to influence the trends of population, it becomes important also to study the means of making such a policy effective. Possible effects of action in the fields of education, public health, industrialization and other fields of economic and social development upon the trends of fertility and mortality and the currents of migration are among the questions to be studied in this connexion, as well as the effectiveness of more direct measures for modifying population trends, where such a national policy is adopted.

The Secretariat has drawn up plans for intensifying assistance to developing countries in basic demographic research during the next few years, under the technical assistance programmes. The plans include provisions for expanding the activities of existing regional demographic training and research centres and establishing such centres in regions where they do not yet exist, providing regional demographic consultants' services to Governments and research institutions in the less developed regions, regional and inter-regional conferences and seminars, and aids to demographic institutions in developing countries.

## ANNEXES

### *Annex I*

#### **Resolution adopted by the General Assembly**

1710 (XVI). UNITED NATIONS DEVELOPMENT DECADE

A PROGRAMME FOR INTERNATIONAL ECONOMIC CO-OPERATION (I)<sup>a</sup>

*The General Assembly,*

*Bearing in mind* the solemn undertaking embodied in the Charter of the United Nations to promote social progress and better standards of life in larger freedom and to employ international machinery for the advancement of the economic and social development of all peoples,

*Considering* that the economic and social development of the economically less developed countries is not only of primary importance to those countries but is also basic to the attainment of international peace and security and to a faster and mutually beneficial increase in world prosperity,

*Recognizing* that during the decade of the nineteen-fifties considerable efforts to advance economic progress in the less developed countries were made by both the newly developing and the more developed countries,

*Noting*, however, that in spite of the efforts made in recent years the gap in *per caput* incomes between the economically developed and the less developed countries has increased and the rate of economic and social progress in the developing countries is still far from adequate,

*Recalling* its resolutions 1421 (XIV) of 5 December 1959, 1514 (XV) of 14 December 1960, 1515 (XV), 1516 (XV), 1519 (XV) and 1526 (XV) of 15 December 1960,

*Convinced* of the need for concerted action to demonstrate the determination of Member States to give added impetus to international economic co-operation in the current decade, through the United Nations system and on a bilateral or multilateral basis,

1. *Designates* the current decade as the "United Nations Development Decade", in which Member States and their peoples will intensify their efforts to mobilize and to sustain support for the measures required on the part of both developed and developing countries to accelerate progress towards self-sustaining growth of the economy of the individual nations and their social advancement so as to attain in each under-developed country a substantial increase in the rate of growth, with each country setting its own target, taking as the objective a minimum annual rate of growth of aggregate national income of 5 per cent at the end of the Decade;

2. *Calls upon* States Members of the United Nations or members of the specialized agencies:

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<sup>a</sup> See also resolution 1715 (XVI) of 19 December 1961.

(a) To pursue policies designed to enable the less developed countries and those dependent on the export of a small range of primary commodities to sell more of their products at stable and remunerative prices in expanding markets, and thus to finance increasingly their own economic development from their earnings of foreign exchange and domestic savings;

(b) To pursue policies designed to ensure to the developing countries an equitable share of earnings from the extraction and marketing of their natural resources by foreign capital, in accordance with the generally accepted reasonable earnings on invested capital;

(c) To pursue policies that will lead to an increase in the flow of development resources, public and private, to developing countries on mutually acceptable terms;

(d) To adopt measures which will stimulate the flow of private investment capital for the economic development of the developing countries, on terms that are satisfactory both to the capital-exporting countries and the capital-importing countries;

3. *Requests* the Secretary-General to communicate to the Governments of Member States any documentation useful for the study and application of the present resolution and to invite them to make proposals, if possible, concerning the contents of a United Nations programme for the Decade and the application of such measures in their respective plans;

4. *Requests* the Secretary-General, taking account of the views of Governments and in consultation, as appropriate, with the heads of international agencies with responsibilities in the financial, economic and social fields, the Managing Director of the Special Fund, the Executive Chairman of the Technical Assistance Board, and the regional economic commissions, to develop proposals for the intensification of action in the fields of economic and social development by the United Nations system of organizations, with particular reference, *inter alia*, to the following approaches and measures designed to further the objective of paragraph 1 above:

(a) The achievement and acceleration of sound self-sustaining economic development in the less developed countries through industrialization, diversification and the development of a highly productive agricultural sector;

(b) Measures for assisting the developing countries, at their request, to establish well-conceived and integrated country plans—including, where appropriate, land reform—which will serve to mobilize internal resources and to utilize resources offered by foreign sources on both a bilateral and a multilateral basis for progress towards self-sustained growth;

(c) Measures to improve the use of international institutions and instrumentalities for furthering economic and social development;

(d) Measures to accelerate the elimination of illiteracy, hunger and disease, which seriously affect the productivity of the people of the less developed countries;

(e) The need to adopt new measures, and to improve existing measures, for further promoting education in general and vocational and technical training in the developing countries with the co-operation, where appropriate, of the specialized agencies and States which can provide assistance in these fields, and for training competent national personnel in the fields of public administration, education, engineering, health and agronomy;

(f) The intensification of research and demonstration as well as other efforts to exploit scientific and technological potentialities of high promise for accelerating economic and social development;

(g) Ways and means of finding and furthering effective solutions in the field of trade in manufactures as well as in primary commodities, bearing in

mind, in particular, the need to increase the foreign exchange earnings of the under-developed countries;

(h) The need to review facilities for the collection, collation, analysis and dissemination of statistical and other information required for charting economic and social development and for providing constant measurement of progress towards the objectives of the Decade;

(i) The utilization of resources released by disarmament for the purpose of economic and social development, in particular of the under-developed countries;

(j) The ways in which the United Nations can stimulate and support realization of the objectives of the Decade through the combined efforts of national and international institutions, both public and private;

5. *Further requests* the Secretary-General to consult Member States, at their request, on the application of such measures in their respective development plans;

6. *Invites* the Economic and Social Council to accelerate its examination of, and decision on, principles of international economic co-operation directed towards the improvement of world economic relations and the stimulation of international co-operation;

7. *Requests* the Secretary-General to present his proposals for such a programme to the Economic and Social Council at its thirty-fourth session for its consideration and appropriate action;

8. *Invites* the Economic and Social Council to transmit the Secretary-General's recommendations, together with its views and its report on actions undertaken thereon, to States Members of the United Nations or member of the specialized agencies and to the General Assembly at its seventeenth session.

*1084th plenary meeting,  
19 December 1961.*

## *Annex II*

### **The Mekong River Project**

The Mekong River Project is probably the most important experience to date of the mobilization, under United Nations auspices, of external assistance for a major regional project. Similar projects may emerge during the development decade. At the same time, as the Mekong project emerges from the pre-investment to the investment stage, the question arises whether the United Nations system may be able to continue to play its initiating, co-ordinating and participating role also in the financing of the project or of parts of it. In line with the thoughts and proposals expressed in chapters II and VI of the report, therefore, the following annex discusses the lessons and possible future of this project which may be of interest in considering various approaches for the development decade.

The various levels at which the United Nations system might participate in national and regional development planning have been discussed in chapter II of this report. At the most intense level of active participation in addition to a co-ordinating and advisory role the United Nations is already a partner in one major regional project, the development of the basin of the Lower Mekong River in South-East Asia. The Mekong scheme is a multipurpose project for the development of the water resources of the Lower Mekong and its major tributaries in respect of hydroelectric power generation, irrigation and water supplies, flood control, navigation and, looking further, the general economic improvement of the whole watershed area. It involves the Governments and people of Cambodia, Laos, Thailand and the Republic of Viet-Nam; a dozen other countries outside the region; eleven United Nations agencies; two private foundations; and a number of business organizations. In view of the importance of the scheme as an illustration of regional development planning under United Nations auspices, a brief account of the history of the Lower Mekong project is given in this annex, together with some general considerations suggested by it.

#### 1. THE BACKGROUND

In terms of the volume of water discharged, the Mekong is the third largest river in Asia, after the Yangtze and the Ganges. The Lower Mekong—the stretch of river from the Burma border to the sea—is over 1,500 miles long, and flows through or forms the border between four countries: Laos, Thailand, Cambodia and the Republic of Viet-Nam. As yet, the potential resources of the river are almost completely untapped. Of the total area under cultivation in the basin of the Lower Mekong, only 2.7 per cent is irrigated, although the rainfall in the basin is at best barely adequate for rice production; there are no hydroelectric works; navigational facilities developed by the French from 1905 onwards (including a system of markers and transshipment facilities round one major fall) have been allowed to deteriorate; flooding is uncontrolled; and there is not a single bridge across the river.

Prior to the establishment of the Committee for Co-ordination of Investigations of the Lower Mekong Basin in 1957 political co-operation between the riparian countries was limited to an agreement signed in 1954, to harmonize action on matters affecting navigation and policing of the river. The three parties to this agreement, Cambodia, Laos and the Republic of Viet-Nam, undertook to observe an earlier (1926) Franco-Thai agreement relating to navigation.

## 2. PRELIMINARY STUDIES

The beginnings of the Lower Mekong project date from 1952, when the ECAFE secretariat published a preliminary study of the problems of controlling and utilizing the Mekong. This study originated in a request by the Commission to the ECAFE Bureau of Flood Control to study the technical problems of international rivers in the ECAFE area. Thus the emphasis on a multilateral approach was there right from the start.

The ECAFE study indicated that the river had a tremendous potential for hydroelectric, irrigational and navigational development, but found that its resources were quite unexplored, and that further detailed investigations would be required before any projects could be formulated. Unstable political conditions made further field work impossible for several years, however, and it was not until after the signing of the Geneva accords in 1954 that any further action could be taken.

In 1955 the three newly independent riparian states—Cambodia, Laos and the Republic of Viet-Nam—joined with Thailand in applying to the United States International Co-operation Administration for assistance in evaluating the developmental possibilities of the Lower Mekong. Early in 1956, after a short field mission, the United States Bureau of Reclamation published a study which examined the existing data relating to the river and its basin and listed the additional data which would be required. The study pointed to the need for data on a very large number of subjects, ranging from hydrological, meteorological and geological information to surveys of the potential power market within the basin, and public health requirements. It did not discuss possible projects in any detail.

Meanwhile, the ECAFE secretariat, with the assistance of consultants from India, Japan and France, had embarked on a survey of the water resources of the Lower Mekong and their development potential. This survey examined the power, navigation, irrigation and flood control possibilities of the river. It identified five possible project sites on the mainstream of the river, where multi-purpose dams (power plus irrigation plus flood control plus navigation improvement) might be built, and estimated that the construction of these five projects would:

(a) Through irrigation, increase single crop yields, permit double cropping, and make crop diversification possible;

(b) Generate 32,000 million kWh of electric power annually at low cost; and that the combined effect of these gains might be to raise the area's exports by about \$300 million annually.

The survey also pointed out that each of these five projects, even if situated entirely within one country, would benefit two or more of the four countries concerned, and re-emphasized the importance of an international approach and international control of the scheme throughout, beginning with data collection.

## 3. ORGANIZATIONAL DEVELOPMENTS

In May 1957, on the basis of the favourable reception accorded the ECAFE report at the thirteenth session of the Commission, the four riparian Governments decided to establish a Committee for the Co-ordination of Investigations of the Lower Mekong Basin. They were assisted by the Legal Department of the United Nations and by the ECAFE secretariat in framing the statutes of this Committee, a problem of great delicacy and difficulty in view of the need to reconcile the requirements of a committee with powers to act—a Board of Directors—with those of its responsibility to the four riparian Governments. The statute provides for a committee of plenipotentiaries with sweeping functions to promote, co-ordinate, supervise and control the planning and investigation of

water resources development projects in the Lower Mekong basin. Each Government has the right to appoint its own member for an indefinite term, all meetings of the Committee must be attended by all participants and its decisions are required to be unanimous. The servicing of the Committee by the ECAFE secretariat is also provided for, and under the rules of procedure, the Executive Secretary of the Commission, in addition to any one of the four members of the Committee, may convene a special meeting of the Committee.

In 1958, following a recommendation by a United Nations technical assistance mission, the Committee appointed a technical advisory board of engineers. Later an economist joined this board, and in 1961 a specialist in the planning and financing of development projects also joined it.

The Committee also decided, in 1959, to appoint an executive agent and ancillary staff to advise it, and through it the riparian Governments, on the administrative and technical co-ordination of plans, and to assist it in carrying out day-to-day co-ordination of the engineering, economic, agricultural and other studies undertaken at the Committee's request by the United Nations and the specialized agencies and under bilateral programmes.

#### 4. ACTION BEGINS

The first action taken by the Committee, in November 1957, was to request the United Nations Technical Assistance Administration to review the studies made to date and to submit detailed proposals for further action. The United Nations mission's report published in January 1958, reaffirmed the existence of great potentialities in the Mekong basin, and, *inter alia*, made the following specific proposals for action:

(a) That the collection of data, on the basis of uniform standards to be adopted by the four countries, should begin immediately, as some of the data would not have validity until they covered a period of at least five years;

(b) Concurrently, special studies of fisheries, agriculture, mineral resources, transportation, the power market, etc., should be begun;

(c) Preliminary planning for important and promising reaches should begin as soon as essential data were available;

(d) Studies and investigations for the preparation of a comprehensive plan of the Lower Mekong River Basin, including major tributaries, should follow;

(e) Qualified, responsible firms of engineers should be employed to plan and execute the proposed operations.

The mission also drew up a timetable for action, based on the five-year period required for the recording of certain hydrologic observations. This timetable indicated that preliminary planning of priority mainstream projects might begin in the third year of the data collection programme, and work on the comprehensive basin plan and tributary projects might begin in the last year of the data collection programme.

The cost of the proposed five-year data collection programme was estimated at \$9.2 million, including \$1.8 million for preliminary planning work.

Besides agreeing to press forward with the implementation of the five-year data collection programme proposed in the United Nations TAA mission's report, the Mekong Committee has taken a number of other decisions regarding the approach to and implementation of various projects, including, *inter alia*:

(a) Recognition of the technical and economic interdependence of the mainstream projects, and thus the need for co-operative and co-ordinated action on them;

(b) A series of decisions to proceed with ancillary economic and fiscal, social, administrative, etc., inquiries, and industrial and agricultural investigations;

(c) An assignment of top priority to three mainstream projects and four tributary projects;

(d) A decision to seek, for each of these seven first priority projects, the preparation of a comprehensive feasibility report in a form which could subsequently be used in loan negotiations;

(e) Adoption of a navigation improvement programme.

## 5. FINANCING THE ACTION PROGRAMME

The finance required for the implementation of the United Nations TAA mission's proposals and for the implementation of decisions (b), (d) and (e) above is being accumulated from a large number of countries and multilateral agencies. By January 1962, just over \$14 million had been pledged or collected, including \$3.4 million by the United Nations through ECAFE, the Technical Assistance Board, the specialized agencies and the Special Fund, \$8.9 million bilaterally by twelve countries, including contributions from seven countries made through the Colombo Plan, and the equivalent of \$1.8 million for local costs pledged by the four riparian countries. These figures do not include the cost of training fellowships made available by TAB, UNESCO, the Special Fund, and seven countries.

Among United Nations agencies, the Special Fund has been the main contributor so far. Following a request by the Mekong Committee in June 1959, the Special Fund has undertaken to supervise and finance the preparation by well established engineering firms of comprehensive project feasibility reports for the four first priority tributary projects, in a form ready for use in subsequent loan negotiations. \$1.3 million has been allotted for these four reports, and a further \$1.4 million for three other Special Fund projects—a hydrographic survey for the improvement of navigation, a survey of the basin's mineral resources, and a delta mathematical model.

The finance for planning and developmental work on the three priority mainstream projects is being provided mainly from bilateral resources.

## 6. PROGRESS TO DATE

The progress made in the implementation of the various projects included in the general plan for the development of the Lower Mekong Basin may be summarized as follows:

(a) *Data collection programme.* This is proceeding on schedule and is expected to be completed by the end of 1964—i.e., within the five-year period originally scheduled;

(b) *Basin plan.* The ECAFE Bureau of Flood Control and Water Resources Development has been authorized by the Committee to prepare a greatly amplified version of the 1957 skeleton plan, in the light of the technical and engineering data becoming available and the results of concurrent economic studies;

(c) *Priority mainstream projects.* A great deal of preliminary work, such as geological surveys, soil sampling, sedimentation studies, etc., has been done. Work on one comprehensive project was begun in 1961, and preliminary investigations for another comprehensive project were launched;

(d) *Tributary projects.* Of the four comprehensive project feasibility studies for the first priority projects, being prepared under the supervision of the United Nations Special Fund, the first is expected to be completed early in 1962, the second by the end of the year and the others in the course of 1963. It is hoped that the first of these projects will be at the construction stage by the end of 1963, and the other three by the end of 1964. Meanwhile, work has begun on the development of a fifth tributary project, which may be at the financing

and construction stage by the end of 1963, and initial investigations of two further projects have started;

(e) *Navigation improvement.* A hydrographic survey of the reaches of the river important for navigation has begun, and some navigational equipment has been provided;

(f) *Ancillary projects and investigations.* Studies under way include a survey of mineral deposits; the establishment of an experimental agricultural farm with a view to developing better crop management practices, crop diversification, etc., concurrently with the development of irrigation facilities; surveys of the incidence of bilharziasis and malaria—diseases liable to spread with the development of irrigation; and a preliminary survey of the manpower resources of the Basin.

## 7. FUTURE DEVELOPMENTS

The 1959 Annual Report of the Mekong Committee to ECAFE estimated that, starting in 1959, the first phase of development might be completed by 1973. The preliminary work of data collection was expected to take five years (to 1964); the planning and design of specific projects two years (to 1966); arranging finance one year (1967); and construction of the first three mainstream projects six years (to 1973). It was anticipated that the construction of at least some of the tributary projects, notably the Nam Pong project in Thailand, might be completed considerably earlier, by 1966.

At the present time, work on the mainstream projects, the tributary projects and ancillary studies is proceeding on schedule. But as the time for moving on to the financing and construction stage of the first group of tributary projects draws near, the problems of finance will arise. However, the problems vary from country to country. In Thailand there should be little problem because several countries and international institutions are ready to provide assistance for any well-conceived project. In the Republic of Viet-Nam and Laos, the problem is affected by the security situation, but when the situation improves, the needed finance is likely to be made available on a bilateral basis or from international institutions. In Cambodia, reliance will presumably have to be placed on bilateral aid, since the country is not yet a member of the international financing agencies (IMF, IBRD, IDA).

A great deal of additional studies will be required before any one of these projects can be adequately justified for construction, and the important thing during the next decade will be to continue these studies in an organized way. It is not certain that initial construction can in fact begin during the development decade.

A recent rough estimate puts the cost of building the first five mainstream projects, including tributary developments roughly equivalent in cost and results to three times the totals involved in the four United Nations Special Fund tributary projects and some navigational improvement, at about \$2,000 million. This estimate includes the costs of construction of dams and locks, power houses and equipment, irrigation canals and pumping stations, etc., but not such ancillary investments as factories to utilize the newly available power, electrical equipment for farms, etc., which might be three to four times as great as the initial investment of \$2,000 million.

## 8. SOME GENERAL CONSIDERATIONS

The Lower Mekong River project is the first large multi-national, multi-purpose development project to be initiated under the auspices of the United Nations. In the belief that there is scope for further projects of this kind in Asia and in other under-developed areas, it is useful to try to identify some salient features which may be applicable to future international development projects.

(a) *The dimensions of the project.* In its essentials, the first phase of the Lower Mekong basin plan consists of a proposal to build five mainstream and about ten tributary multiple-purpose dams (hydroelectric power, irrigation, flood control) and to improve the navigational facilities on the river. But throughout the formulation of even this first phase there has been a consciousness of the ramifying nature of such a scheme, reflected in the emphasis on the need for concurrent studies of general economic conditions, agricultural problems, social and manpower problems, etc. Already the scheme includes some forty component sub-projects, and this number is constantly growing. It is also recognized that secondary investments in projects designed to utilize the additional resources created by the Mekong scheme are likely to be several times as large as the original investment, and of very great variety. The sense of a growth-initiating project, reaching out and affecting nearly every sector of the economy of the whole area, is very strong.

(b) *International aspects.* From the 1952 ECAFE study onwards the emphasis has been on the advisability of an international approach to the project, with the United Nations regional economic commission providing the initial forum for co-operation between the countries concerned, and subsequently acting in an advisory and, to some extent, in an administrative capacity, and in consequence of the fact that all the main countries contributing assistance are represented on it, as an organ for the co-ordination of their efforts. The Mekong scheme is significant for the four riparian countries politically as well as economically. It is proving to be a co-operative, constructive and stabilizing influence of considerable importance at the present time, when relations among some of the riparian countries have been difficult.

(c) *Administrative complexities.* The history of the scheme to date provides plenty of examples of the great complexity of the undertaking. The appointment of an Executive Agent—analogue to the general manager of a business—and administrative staff at an early stage was essential to ensure the proper co-ordination of the widely diversified preliminary studies already under way, and to facilitate arrangements for the execution of the preparatory work, much of which is being financed by grants in kind. Thus, for example, India has supplied 366 rain gauges to aid in the collection of essential data; Canada has commissioned a private Canadian firm to undertake aerial survey work, and Iran has supplied petroleum products.

(d) *The problem of control.* The statute establishing the Co-ordinating Committee reflects the desire of the participating countries to create an authority that would have power to act and yet would be ultimately responsible to the four Governments concerned. So far, the Committee has operated successfully as an executive body, but it is clear that its continued success depends on the continuing will of the governments to support the Committee and the scheme wholeheartedly, even in the face of local political difficulties. The Committee, in turn, reflected the need to ensure efficient day-to-day management of the whole scheme by appointing an Executive Agent.

(e) *The practical approach.* Since the adoption of the UNTAA mission's report as basis for action, the emphasis has been on identifying and performing specific studies, surveys, planning, etc., within a given time. Among the most significant of the Committee's actions was the request to the Special Fund to commission engineering firms, not *ad hoc* groups of experts, to prepare general feasibility studies of the four priority tributary projects in a form which could subsequently be used in loan negotiations, thereby eliminating a stage of the project development process.

(f) *Financing.* Most of the external assistance made available so far has been in kind rather than in cash. As yet this has not seriously hampered work on the various sub-projects, but it is becoming increasingly apparent that an operational cash account will be a necessity if development is to proceed at the

maximum feasible pace. It is not always possible to find a donor to provide exactly the equipment or services needed to complete a study or project: for example, the establishment of a hydraulic budget, in connexion with one main-stream project, requires some \$10,000 worth of hydrologic equipment and vehicles which it has not yet been possible to obtain. "Shopping" for donors of individual items is a wasteful and time-consuming process which could be eliminated by the establishment of a cash budget on even a quite modest scale.

(g) *The time scale.* Perhaps the most significant feature of the Mekong River project for the development decade is the time scale on which it is conceived. Already ten years have passed since the idea was first conceived, and as yet no actual construction work has begun. As early as 1959, the Committee envisaged that the completion of the first phase of the project might take twenty-five years, and outlined fairly detailed plans for the progress of development on a number of related projects during the first fourteen years, starting with five years of work on data collection. The full utilization of the economic potential created by the scheme will take very much longer—and if it contributes to the initiation of self-sustaining growth in the area affected by it, may be said never to reach an end.

In addition to these general considerations, it may also be useful to summarize the organizational and institutional framework within which the Lower Mekong project has developed. It may hold lessons for the establishment of regional projects on a similar scale elsewhere.

(a) The project must be directed by the countries in which the project is located—as the Mekong Project is directed by Cambodia, Laos, Thailand, and the Republic of Viet-Nam;

(b) The project countries must establish an international instrument to deal with the work—as Cambodia, Laos, Thailand, and the Republic of Viet-Nam have established the Mekong Committee;

(c) The international instrument thus established must have clearly specified and adequate powers—as the Mekong Committee has under its statute the authority "to promote, co-ordinate, supervise and control the planning and investigation of water resources development projects"; and the power "to receive and administer separately such financial and technical assistance...";

(d) The international instrument may be effectively serviced by an international secretariat—as the Mekong Committee is serviced by the ECAFE secretariat, and uses a United Nations staff member as its executive agent or general manager;

(e) A way must be found to attract substantial support from a number of countries, United Nations agencies, and foundations—as the Mekong scheme has attracted the support of twelve countries, eleven United Nations agencies, and two foundations;

(f) Administrative flexibility should be achieved through combining (i) permanent secretariat staff, giving continuity; (ii) major non-permanent component project teams, such as the Mekong Canadian aerial survey team, Australian Mekong Damsite geology team, Indian Mekong Tonle Sap design team, U.S. Mekong hydrologic team, and the four Special Fund Mekong project teams; and (iii) short-term technical assistance consultants and teams, for example the Wheeler mission and the Committee's advisory board;

(g) The project must seek the welfare of all populations involved and rigorously eschew consideration of differences based on politics;

(h) The project will gain from adherence to the three administrative principles of candour, anticipation, and economy.

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