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The Country Situation
and Contribution
of International Organizations



**IMPLEMENTATION OF THE LIMA DECLARATION
AND PLAN OF ACTION**

The Country Situation and Contribution of International Organizations

Report of the secretariat of UNIDO

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna

**IMPLEMENTATION
OF THE LIMA DECLARATION
AND PLAN OF ACTION**

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and Contribution of International Organizations**

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UNITED NATIONS
New York, 1979

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This report examines the replies received from the Governments and international organizations concerned to the questionnaires sent to them by the United Nations Industrial Development Organization in 1978 to assess the progress achieved towards the implementation of the Lima Declaration and Plan of Action in pursuance of paragraph 3 (c) of the Industrial Development Board resolution 45(IX) dated 30 April 1975. It reflects the views of the Governments and international organizations on their individual and collective actions taken since 1975 to achieve accelerated industrial development within the framework of the Lima Declaration and Plan of Action, as described by them in their official replies to the questionnaire, as received in UNIDO between November 1978 and June 1979.

EXPLANATORY NOTES

Regional, industrial and economic classifications and symbols, unless otherwise indicated, follow those adopted in the United Nations *Statistical Yearbook*.

The following classification of economic groupings is used in the text in conformity with the classification adopted by the United Nations Statistical Office: "Developing countries" includes the Caribbean area, Central and South America, Africa (other than South Africa), the Asian Middle East (other than Israel) and East and South-East Asia (other than Japan). "Developed countries" includes North America (Canada and the United States of America), Europe (other than Eastern Europe), Australia, Israel, Japan, New Zealand and South Africa. "Centrally planned economies" includes Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Romania and the Union of Soviet Socialist Republics, but not Albania, China, the Democratic People's Republic of Korea, Mongolia and Viet Nam. For statistical convenience, the classification in some places in the text may differ from that given above.

For stylistic reasons certain other denominations of country groups are also used in the text. The terms "South", "third world" and their derivatives refer to all developing countries. The term "North" and its derivatives refer to the industrialized market economy countries, broadly synonymous with the OECD area. "Industrialized countries" refers to the developed market economy countries and the centrally planned economies in Europe. These definitions are not rigorous, however.

"Manufacturing" includes the industry groups listed in major division 3 of the International Standard Industrial Classification of all Economic Activities (ISIC), unless otherwise indicated.

Dates divided by a slash (1960/1961) indicate a crop year or a financial year.

Dates divided by a hyphen (1960-1965) indicate the full period involved, including the beginning and end years.

References to dollars (\$) are to United States dollars, unless otherwise stated.

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

The following abbreviations are used:

ACP	African, Caribbean and Pacific States in association with EEC
CMEA	Council for Mutual Economic Assistance
DAC	Development Assistance Committee (OECD)
ECA	United Nations Economic Commission for Africa
ECLA	United Nations Economic Commission for Latin America
EEC	European Economic Community
FAO	Food and Agriculture Organization of the United Nations
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GNP	gross national product
ODA	Official Development Assistance (OECD)
OECD	Organization for Economic Co-operation and Development
R and D	research and development
SITC	Standard International Trade Classification
UNCTAD	United Nations Conference on Trade and Development
UNESCO	United Nations Educational, Scientific and Cultural Organization
WIPO	World Intellectual Property Organization

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Introduction

1. The last decade brought with it a new awareness of the contemporary world. Nations, big and small, rich and poor, realized that all was not well with the world economy, suffering as it did from inequity, imbalance, disorder and distortion. Differences in approach, ideology, circumstances and capacities notwithstanding, this new awareness led to a series of investigations, followed by intensive international discussions directed towards effective adjustments. Popular consensus emerged on the necessity of international co-operative programmes aimed at restructuring the existing economic order. One of the earliest and most comprehensive programmes—the Lima Declaration and Plan of Action on Industrial Development and Co-operation (ID/CONF. 3/31, chapter IV),¹—was formulated by the international community in early 1975. In the Declaration, the grave consequences of the economic crisis confronting the international community were revealed and the role of industry as a dynamic instrument of growth emphasized. A series of actions at global, regional, country and sectoral levels were recommended for the industrial and economic development of the developing countries, including the target of the developing countries' achieving a share of at least 25 per cent in world industrial production by the year 2000.

2. At its ninth session in May 1975, only a few weeks after the adoption of the Lima Declaration and Plan of Action, the Industrial Development Board, in paragraph 1 of resolution 45 (IX), requested all Governments to take "necessary measures and decisions required to implement effectively their undertakings in terms of the Lima Declaration and Plan of Action". In paragraph 3 (c), the Board asked the Executive Director of UNIDO "to request periodically, from Governments and international organizations concerned, information on the action taken and the progress achieved towards implementing the Lima Declaration and Plan of Action". Later, in September 1975, the General Assembly at its seventh special session adopted resolution 3362 (S-VII) on development and international economic co-operation, in which it included the Lima Declaration and Plan of Action as one of the essential elements in achieving the new international economic order. The exercises carried out by UNIDO both in 1976–1977 and 1978–1979 to monitor the progress achieved

¹ Transmitted to the General Assembly by a note by the Secretary-General (A/10112). Also available as UNIDO public information pamphlet PI/38.

are, therefore, an attempt to follow the genesis of the new international economic order—its generation, development and evolution—inasmuch as they deal with the process of industrialization in the developing countries.

3. In retrospect, the 1976–1977 exercise proved a little early for assessing the global efforts towards implementing an elaborate programme such as that envisaged in the Lima Declaration and Plan of Action. Consequently, of the 149 Governments to which questions were addressed by UNIDO, only 48 found it possible to reply, and their replies were of a general nature. It was obvious that the Governments were not yet ready to report. The ideas and new directions expressed in the Lima Declaration and Plan of Action had still to create an impact on the economic and industrial workings of the countries, to inspire their interest and to prompt their imagination sufficiently to produce meaningful replies.

4. In the light of the experience gained during the first monitoring exercise and the views expressed at the eleventh and twelfth sessions of the Industrial Development Board in 1977 and 1978, the second round of monitoring was initiated in May 1978. Two sets of revised questionnaires—one for the developed and another for the developing countries—encompassing the principles and objectives of the Declaration and covering the major sections of the Plan of Action were prepared and sent to Governments. The international organizations whose activities were directly referred to in the Plan of Action or were relevant to it were also approached for their observations about the effectiveness of their activities.

5. In formulating the questions, care was taken to ensure that they were applicable to countries which had different economic systems or were at different stages of development. The main consideration was to gather authentic, up-to-date and pertinent information from the Governments. The objective was to establish what importance the countries attached to the development of the industrial sector and its key components, the problems they faced in implementation and the measures they were taking to solve them, and the views they might have on improving the climate of international co-operation to ensure the implementation of the Lima Declaration and Plan of Action.

6. There was a certain apprehension that the questionnaires usually fail to elicit information fully reflective of conditions in different countries, however the experience in the second exercise has proved positive and rewarding. Not only did the number of countries responding to the questionnaires more than double (annex I), but their replies were more illustrative and comprehensive than in the earlier exercise. The majority of Governments were precise and objective in their observations about their situations. Amidst the gloom that envelops the economic world today, there are signs of hope which can be unmistakably recognized in the replies. The contribution of individual countries towards the implementation of the Lima Declaration and Plan of Action can be visualized from the substance of their replies—even if they cannot be statistically analyzed.

7. This report is based solely on the facts given and views expressed by

Governments in their replies to the questionnaires. Annex I shows unfortunately not all countries responded, consequently information on the situation in certain countries will be conspicuously missing in this report. More detailed studies of the current state of industrialization in the world and of international industrial co-operation are provided in two other studies prepared for the Third General Conference of UNIDO.²⁻³ The observations of the Governments as reflected in this report often confirm the findings of these two studies.

8. This report comprises two main chapters. The first deals with measures of national scope which the developing countries have adopted towards the implementation of the Lima Declaration and Plan of Action. The second relates to International Co-operation. The details of the contributions from countries and organizations in the second monitoring exercise are available in a separate document (UNIDO/ICIS. 118).

9. That some developing countries have already acquired a high level of industrialization now seems to be an established fact. For their less industrialized neighbours in the respective regions the newly emerging industrialized states are likely to be a source of inspiration. Indeed, several countries reported being influenced by their more accomplished neighbours in their pursuit of industrial and economic advancement.

10. In the uphill task of industrializing the developing countries, as depicted in the replies from the Governments, certain gradients are worth noting. A few developed countries display a sense of urgency, and an active earnestness in respect of the problems of the third world. Others, although indicating active support for the spirit of the Lima Declaration and Plan of Action, allow their reservations about the International Development Strategy for the Second United Nations Development Decade⁴ and Declaration and Programme of Action on the Establishment of a New International Economic Order to remain.⁵ One country specifically pointed out that it intends to continue to make every effort to implement those provisions of the resolutions and declarations with which it has associated itself. The fact that Governments of developed countries have often made sympathetic observations about the industrialization efforts and achievements of the developing countries seems to indicate a commitment to the objectives of the Lima Declaration and Plan of Action.

11. In sum, the experience of the two monitoring exercises shows that a period of three years should elapse between successive monitoring exercises if meaningful results are to be achieved.

² *World Industry since 1960: Progress and Prospects* Special Issue of the Industrial Development Survey for the Third General Conference of UNIDO (ID/CONF. 4/2) (United Nations Publication, Sales No. E. 79. II. B. 3).

³ "Industry 2000: New perspectives" (ID/CONF. 4/3).

⁴ See General Assembly resolution 2626 (XXV).

⁵ See General Assembly resolution 3201 (S-VI) and 3202 (S-VI).

I. National Measures of Developing Countries

12. On the principle that no help is like self-help, emphasis is placed in the Lima Declaration and Plan of Action on certain areas where the developing countries through national policies have to play their part in order to realize their industrial goals and the Lima target. These areas call for measures of national scope, actions and initiatives which the developing countries can take within their national framework to ensure a pace and quality of industrial development commensurate with their environment and national conditions. These actions and initiatives are spread over a wide field of economic activity and affect the whole spectrum of a country's industrial development. They embrace such activities as planning and strategy, setting up of financial and other institutions, elimination of social disadvantage, promotion of technology, establishment of production facilities, interregional development, training and utilization of natural resources.

13. In the Lima Declaration and Plan of Action the developing countries are called upon to incorporate in their national development clearly defined plans and strategies of industrial development. To ensure the effective implementation of these strategies, adequate institutional machinery should be provided. Among other things, the countries were advised to appraise the implementation and progress of their plans regularly. It was suggested that appropriate attention should be given to the development of the government sector and the maintenance of a reliable data base.

14. Although the replies to the questions about the plans and strategies do not lend themselves sufficiently to statistical treatment, they do reflect trends and policies and indicate the paths leading to the achievement of economic goals and the place industrial development has been assigned in the pursuit of social and economic development. The speed with which the developing countries have moved towards the Lima target and the ground covered in the last four years have already been dealt with in some depth in the two studies mentioned earlier.^{2, 3} There is hardly a country today in the third world which does not consider industrial development, self-reliance, international co-operation based on mutuality of interests and social justice to be cardinal planning principles. It is now evident that industry is an important means of achieving the social and

economic goals of the developing countries, and in the past few years the majority of third world countries have accepted that fact: the national plans show a clear bias in favour of industry. (The annual industrial growth targets and the major groups of manufacturing industries included in the current development plans of the developing countries that responded to the questionnaire are given in annex II.)

DEVELOPMENT PLANNING AND POLICIES

15. UNIDO solicited information on the long-term industrial growth potentials of the developing countries, their optimal realization through policies and planning, and the nature of their plans. It also invited information on the implementation machinery and the attention given to the development of the government sector. As a starting point, it seems relevant to examine the measures the developing countries have taken in the four years since the adoption of the Lima Declaration and Plan of Action. In this connection a fact worth noting is that most countries will be completing medium-term development plans (four, five or six years in duration) in the early 1980s. The message from Lima, therefore, came in time to be absorbed in the current cycle of national development plans. Most of the Governments of the developing countries report that they have formulated industrial development plans of some description "within the framework" of national development plans, or, in some cases, as special exercises. It would thus appear that the approach of a majority of countries to industrial planning is not at variance with the Lima Declaration and Plan of Action.

16. With very few exceptions, the plans of most of the developing countries are limited to the medium term (annex II). Only a third of the reporting countries seem to have attempted long-term planning. For example, in India it has been possible for successive Governments to conceive their five-year plans against a long-term perspective. The first plan was set against a simple projection of economic growth over a period of 15 years. Similarly, Malaysia, which is now in its third five-year plan, has formulated a long-term plan known as the Outline Perspective Plan covering a twenty-year period from 1971 to 1990. In Cuba, preparations are being made for the formulation of a "Development Strategy" for the period up to the year 2000. In Peru, projections for industrial growth up to 1990 have been prepared as an integral part of the National Planning System. In Iraq, existing long-term projections for industrial growth up to 1995 are now being updated to the year 2000. Ivory Coast reports that the present development plan is largely based on conclusions of a study on the country's long-term prospects entitled "Ivory Coast 2000". In Romania, while macro-economic projections are prepared for periods of 15 to 20 years, special programmes for some sectors have been prepared for 30 to 35 years. The present 5-year development plan of Yugoslavia is the first period of a 10-year plan extending to 1985 and new projections to cover up to the year 2000 are under preparation. By way of contrast, Cyprus commented that owing to dramatic change in the economic and other conditions, the foundations on

which the preparation of the third five-year plan and its aims and objectives had been based no longer existed. There was, therefore, a need to readjust the plan by setting new targets, adopting new programmes and policy measures geared to the new situation. This is by no means a solitary example of a country where the element of uncertainty has hindered the smooth sailing of the plan. It may not be incorrect to surmise that in general it has not been possible for many countries to enjoy the conditions necessary for long-term planning. Political and economic stability, from which long-term planning springs, have been generally lacking. To some extent, the resource endowment of a country also contributes to long-term planning. Other factors include the size of the population, the balance of trade situation and access to financial resources. No wonder that countries which have been able to undertake long-term planning have had one or more of those factors favourable to them.

17. Planning in the third world is a central government activity. The agency responsible for planning is in most cases autonomous in status and answerable directly to the chief executive of the Government. There are exceptions but not many; however, even in the exceptional cases planning is regarded as a collective responsibility of various ministries. Being such an important function in the developing countries, planning acts as the main policy package of the Government in all spheres of national life. Consequently, it is highly sensitive to revolutionary change and sudden ideological shifts. This is evident from the information received from some countries that have abandoned their development plans in the last four years as a result of a change in Government. The role of the Government in planning, and therefore in industrial development, has this additional dimension that has to be borne in mind when assessing the economic and industrial progress of the developing countries. A change in midstream or a complete turnabout will have to be counted as a factor of retrocession in the industrial development of the developing countries. The emphasis placed on planning in the Lima Declaration and Plan of Action is a reflection of the generally and widely held view that Governments operate as agents of change. They lay down industrial policies, arrange and control substantial portions of the required capital, and oversee the implementation of plans. In several cases, as illustrated in the responses to this monitoring exercise, Governments set the priorities and apply checks and balances wherever necessary.

18. With the increasing role of the state in the economic and social development in the third world, industrialization has come to occupy a central place in national development. Governments in developing countries are using a variety of instruments which stimulate and direct the private sector, regulate direct government participation in the manufacturing sector, and encourage co-operatives. The public sector is emerging as a major instrument of national policy and industrial development. It covers a wide field ranging from financial and service institutions to enterprises in heavy industry, trading, transport and communications, and even construction and consultancy. In their responses, several Governments commented that the productivity and effectiveness of the public sector would increase in years to come. Turkey has made a pointed reference to its state economic enterprises whose investments would be

channelled into large-scale integrated industries employing modern technology. In Pakistan, a sizeable investment has been earmarked for the public sector of which about 69 per cent is for basic industries. The public sector is thus undergoing enlargement in size, resources and responsibilities. In many cases, it seems to have assumed the role of adaptor of extraneous technology and initiator of indigenous technology. Of particular importance is the role of Governments in industrial development in the centrally-planned economies where the state sector is the main functionary. In some other countries, owing to the non-existence of any appreciable industrial infrastructure, Governments have to devote proportionately higher resources and time to economic and industrial development. For example, Papua New Guinea has set up a National Planning Office in the Department of National Planning and Development, for the preparation of its quinquennial planning. Similarly, in the Republic of Maldives a National Planning Agency was established in December 1978 for the purpose of laying down economic development policies and plans. In the United Republic of Cameroon, the Government draws up a five-year plan only for economic, social and cultural development, and the current plan which ends in 1981 does not include a detailed analysis of the industrial sector. Recently, the Government has started gathering preliminary data for the formulation of an industrial plan and the preparation of realistic sectoral forecasts.

19. However, the success of Singapore is unique and as striking today as it was in the first monitoring exercise in 1976: a cheering example of efficient and skilful husbandry of a thin physical-resource base. Singapore has no long- or medium-term plan for industrial development, and yet its contribution as a pace-setter to the achievement of the Lima objectives is about as important as that of any large developing country. At the other extreme, Zaire reports that its development planning is greatly handicapped by the uncertainty of its export earnings from copper, the mainstay of its economy. The responses to the questionnaire clearly indicate that developing countries regard industrial development as an integrated function to be viewed in the overall context of economic and social development. In particular, the interplay of productive sectors such as agriculture and industry has to be in harmony and co-ordinated.

PRIORITIES AND TARGETS

20. UNIDO invited Governments of the developing countries to supply information on matters relating to production facilities in the various branches of industry for domestic needs and export, development of basic and integral industries, sectoral priorities, and industrial development targets and strategies.

21. In recent years, several developing countries have been able to expand appreciably their industrial bases while maintaining industrial growth rates of at least 5-7 per cent. Their industrial profile is already quite pleasant. Their rate of growth, even if it is low, has a vital bearing on the developing countries' total share of world industry. It is on the basis of their performance that some observers think that the third world may well be able to achieve its targeted share in world industry.

22. Several countries have included in their plans specific and itemized

growth rates for all sectors and subsectors of industry (annex II). In some cases both physical and financial growth targets have been set. But in those cases where the state plays only a subsidiary role in planning industrial development, the private sector is left to determine its own strategy and targets independently. In their growth estimates some mineral-rich countries have so integrated industry and mining that a sectoral balance in growth is maintained. Annual growth proportions have been carefully worked out. In many cases it is expected that both industry and mining will grow evenly, while in other cases manufacturing has been planned to grow as the largest sector of the economy.

23. The establishment of manufacturing and processing industries meeting the needs of internal markets, the development of basic and integral industries, the expansion of agro-based or agro-related industries on a priority basis, together with natural resource-based industries and the full utilization of the potential offered by the export of manufactures – all are industrial development strategy options contained in the Lima Declaration and Plan of Action. In this respect, the picture that emerges from responses received from the Governments is that in countries having an industrial infrastructure, a tendency exists to establish a broad industrial sector which may include not only agro-based, agro-related and other natural resource-based industries, but also basic and tertiary industries (annex II).

24. From the responses received, it has not been possible to assess the exact extent to which developing countries have been able to achieve their industrial development objectives. What emerges clearly, however, is that in most of the developing countries agriculture continues to be an important basis of industrial planning, with modernization of agriculture and the provision of jobs to the rural masses, preferably on farm lands, being mentioned as the main thrust of these countries' plans. With them is associated the development of agro-related industries. In several cases, a clear sequence of sectoral priorities emerges, for example: "processing of agricultural products, building material industries, mining, food industries, manufacture of agricultural equipment, textile and leather industries" (Burundi), or an order of priority such as "agro-industries, cotton processing and building materials" (Mali) or a different set of priorities such as "agriculture, mining, energy, health, education, infrastructure, transport and communication" (Bolivia) – all indicate that agriculture and the basic needs of the population are the primary concerns. This is reflected in all their plans and policies for various sectors including industry. It is quite evident that their resource endowment markedly influences their pattern of industrial development priorities.

25. In countries which do not lack capital, are not agricultural and have to import labour, the first priority is obviously capital-intensive industry: for example, countries whose main resource is oil are building up, in addition to petrochemicals, a number of other industries, such as steel, metallurgical, chemical and engineering industries (Iraq, Oman, Saudi Arabia, United Arab Emirates). This is in line with the general objective to diversify their economies and reduce total dependence on oil. Some such countries (e. g. Indonesia and Venezuela) are well endowed with other resources, including manpower and agriculture. For rapid industrialization they have accorded top priority to the

building up of industrial infrastructure without relegating other sectors. In Indonesia substantial investment has already been made in the establishment and expansion of the cement, fertilizer, paper and petrochemicals industries, which are all capital-intensive, with an eye to their effect on smaller industries through which the country expects to have resultant growth. In Venezuela, on the other hand, the main emphasis is on the metallurgical industry, ship-building and machinery manufacturing. Other countries (e. g. Ecuador and Mexico) are also laying considerable emphasis in the development of capital goods industries, especially the automotive industry.

26. Of the populous agricultural countries, those in South Asia have several features in common, whereas their priorities vary according to their level of industrial development. Having built a solid industrial base, India now places emphasis on mass consumer, intermediate, cottage and small-scale industries, in that order, so as to cater to the needs of its large population, and its large-scale industry is correlated to this objective. Its immediate neighbour, Pakistan, places emphasis on expanding the industrial base of manufacturing units in order to produce basic industrial and agricultural inputs and enhance the capability of the capital goods sector.

27. In Malawi, where the industrial growth rate is approximately 11 per cent per annum and where that sector contributes approximately 12 per cent to the GDP, efforts are concentrated on the development of agro-industries (cotton, rice, sugar, tobacco and tea). In addition the planning of a multimillion dollar project for the production of pulp and paper is at an advanced stage. Madagascar has fixed average annual growth targets at 31 per cent for basic industry and 18 per cent for heavy industry. Lesotho which is in the earliest stages of industrial development is confining its efforts to food processing, leather products and non-metallic minerals to utilize its domestic resources better. It proposes to move towards metal industries, textiles and garments in the near future. Morocco is already giving consideration in its present plans to the manufacturing sectors, whose production capacity may be reviewed in the light of a future restructuring of world industry, and reports that it is developing a substantial manufacturing potential for phosphoric acid and chemical fertilizers. The United Republic of Tanzania, having projected an annual growth of 9.3 per cent for the industrial sector as a whole, with priority subsectors in a diversified gamut of manufacturing industries, acknowledges that for real development it is to a large extent dependent on external sources for its machinery and equipment, and that its main source of foreign earnings for acquiring such imports is generated through exports of its primary commodities. Therefore, as is the case in many developing countries, development of industry is heavily dependent on the primary sector.

28. Brazil has thoroughly elaborated long-term investment programmes for the capital goods, component production and basic input subsectors. In 1977, as much as 75 per cent of the industrial projects approved by the Government related to the manufacturing of machinery and equipment. There are cases like Colombia, where although the current development plan does not contain specific growth targets for industrial sectors or subsectors, agro-industry is regarded as the basic sector. Similarly, Peru, while having set quantified

production goals for the supply of essential goods, establishes as a guiding framework the substantial increase and diversification of domestic production of foodstuffs, and the increase of exportable production with a view to ensuring a flow of external resources. Cuba, on the other hand, has set targets for the expansion of practically all major groups of manufacturing industries.

SOCIAL OBJECTIVES

29. With a view to discovering the social welfare content of industrial development, UNIDO requested the developing countries to provide information on such components of economic development as social justice, equitable distribution of benefits of industrialization, elimination of social disadvantages, impact of industrialization on employment, incidence of rural exodus, integration of women in the industrialization process and plans and measures for integrated, but geographically dispersed industrialization.

30. No development strategy can lead to the attainment of the overall objective of social welfare unless it is grounded in the principle of gainful employment for the entire population of working age. Unfortunately, in the majority of countries of Asia, Africa and Latin America, unemployment and underemployment are common features and industry has a relatively small share in total employment. Barring the very few industrialized and urbanized countries in the third world, the maximum absorption of manpower in the industrial sector is not more than 12 per cent of the total active population. (The lowest reported is 4 per cent.) Under the circumstances, industrialization in the developing countries is not merely a means of generating wealth and attaining self-sufficiency, but it is also being planned on account of its capacity to provide employment. In their growth estimates countries are also including the employment growth factor. Certain countries have suffered from high rates of unemployment and wide income disparities throughout their history. The situation has been further aggravated in some cases due to underexploitation of the country's potentials and characteristics (natural resources and social and economic structure). However, it is cheering to note that in some countries the incidence of underemployment and unemployment dropped between 1974 and 1978 and that expansion of both the industrial sector and exports was the main cause of the drop. In many countries, exodus of the rural population in search of jobs or for better life in the cities is a fundamental problem, causing considerable concern. Agriculture either is becoming highly saturated, or is comparatively unattractive and the rural environment too cheerless and insipid to keep the rural youth from looking elsewhere for opportunities. These two features are affecting the young generation even in some of the more remote regions. As a result, agriculture in a number of countries is losing manpower. Often, even seasonal labour is not easily available. Another form of exodus is the migration of labour to countries deficient in manpower and skills. This has not been fully reported by countries that are exporters of labour, but it emerges from references to expatriate labour made by countries which are users of this labour. At present, this labour is contributing in several ways. To the home countries it provides relief to the unemployment situation and the widening

trade gap. At the same time, it also has an effect on consumption patterns and the incidence of inflation. Furthermore, it has brought about a shortage of skilled and semiskilled workers and artisans in the home countries. The host countries, on the other hand, benefit from the expatriate labour.

31. Decentralization of industry, which is conducive to the equitable distribution of the benefits of industrialization, is now an accepted planning principle in a number of countries. Laws and regulations are being framed to suit. Furthermore, industrial estates are being set up to achieve planned geographical location of industry. In a number of larger countries the picture is almost a facsimile of the North-South situation. As a result, all these plans to even out disparities may not yet have had a very noticeable effect upon the geographical distribution of economic advantage or narrowed the gap in the regions and subregions. Pakistan, having gone through a long enough period of planned development and having practical experience in the building of industrial infrastructure, does not seem to be too enthusiastic about setting up industrial estates and feels that in themselves industrial estates do not significantly stimulate establishment of manufacturing units and often prove premature and wasteful. Government has to participate directly in investment if further polarization of industry is to be avoided through proper locational policy. In Paraguay, dispersal is not being used as a policy. Comparative advantages of various regions are put to good effect to avoid over-concentration and other imbalances. Several countries have decentralization programmes with targets. Some Governments are using their "approving" and "licensing" authority to ensure a planned location of industry and a balance between urban and rural development. In some Latin American countries measures are being taken to restructure the present national socio-economic territorial patterns. It is reported that through the organic development of urban and rural regions an attempt is being made to establish functional communities of adequate size throughout the country. That should result in a steady integration of all regions and the expansion of internal socio-economic frontiers—an imperative for political stability and full national participation in the economic development of a country. Nevertheless, other countries are examining factors such as the natural resources of various regions, raw materials produced and the existing vocational base in order to decide upon appropriate locations of manufacturing units. Although few and far between, these instances hold out the promise that industry will develop in congenial socio-economic locations. However, as some countries have explained, dispersal of industries is not a universally applicable solution. First, they remark, in the long term, industrial dispersal may convert rural areas into new industrial urban concentrations. Secondly, being essentially agricultural economies and already faced with a slow-down in agricultural production, these countries do not favour introducing yet another element of deflexion for their pastoral society. Thirdly, entrepreneurs are often not willing to join a venture, irrespective of incentives and reliefs provided, if it is located outside their conventional area of operation. Lastly, the problems of servicing, modernizing and expanding some industries could be so formidable that sufficient financial and investable resources would not be available for setting up the infrastructure needed to attract industry to new locations.

32. In summary the replies indicate that the impact of industrialization on employment should be heeded not only by those countries which have surplus manpower, but also by those which have a shortage of manpower. Countries have indicated their preference for a scale of industry that takes full account of their traditional economy, availability of manpower and employment situation. Small and medium-sized industries are given particular attention in most cases because of their job-creating capacity. Cottage and craft industries are encouraged in a number of African, Asian and Latin American countries. Some countries have also expressed their inability to create more industrial jobs because they do not have enough capital for industrialization on any scale. That is why they are not extending their efforts beyond handicraft and small-scale industrial development. Rural and agro-based industries receive priority in the agriculture-backed economies. Petrochemicals, mineral refining and processing, and the metallurgical and engineering industries receive first preference in mining economies. Employment-intensive sectoral planning is indicated by countries with a high rate of unemployment. The whole structure of production in these countries has to be designed to stimulate a high rate of growth in both employment and production. Where the development of small- and medium-scale industry is being promoted together with the decentralization of industry, the objective is stated to be wider and more equitable distribution of benefits to all sections of the population.

33. Not many countries commented on the question of integration of women in the industrialization process, although the subject is of special relevance to the developing countries and it is mentioned in the Lima Declaration and Plan of Action as an objective worthy of special attention. The integration of women in the industrialization process is intimately related to social structures, traditions, cultural moulds and value judgements of the various societies in the third world. It is well known that in most of these countries women work on farms and in the industrial and construction sector. Their proportion in the work force varies from country to country. However, the participation of women in running these societies is often misjudged and misunderstood by observers not intimately familiar with the essential characteristics of these societies. Although the contribution of women to their countries' economies may not appear substantial in money terms, women are by no means dormant and inactive. Indonesia reports that women are taking part in small industries and handicraft activities, whereas in Ghana the National Council on Women and Development is attending to the task of participation of women in all sectors of the economy. In India, programmes have been introduced for expanding and diversifying the education and training of women. Bank credits are also made available to women to help them manage their enterprises better. Papua New Guinea also mentions the principle of equal participation of women in the economic life of the country as one of its basic developmental aims.

34. Some of the other social objectives mentioned by several countries as part of the development package are education, health, roads, electricity, housing, better wages, social security and an elaborate programme of rural development. Since these are long-term objectives, it is too early to visualize the

extent to which they are being achieved. Certainly, they cannot be overlooked, but their accomplishment has to depend on a number of factors, some of which are not too readily available in these countries. There are pressures and imponderables, not mentioned by the countries in their replies, that make the task of accomplishing such goals difficult. It would be outside the scope of this report to describe these imponderables and pressures in any detail. It is nevertheless clear that the social content of industrial development, more precisely the quality of life of the people in an industrializing country, is becoming increasingly prominent in the matrix of economic planning.

UTILIZATION OF NATURAL RESOURCES

35. The responses to the questions under this heading touch upon the developing countries' effective control and use of their natural resources and the extent to which they are placing premium on self-reliance. Governments were asked to inform how their plans conformed to their countries' characteristics, how they were attending to the question of further processing of raw materials, and what economic advantages they were deriving from the utilization of their natural resources. An interesting observation in this regard comes from Brazil, where in view of the traditional dependence on foreign countries and the vulnerability of foreign accounts the Government is constantly concerned about the use of the country's natural resources. For this purpose, it instituted the National Basic Inputs Programme and the Programme for the Nationalization of Capital Goods. The results are already visible: production of the main intermediate goods sectors in the manufacturing industry has grown over the past two years at rates exceeding those of domestic demand for those products (measured by the rate of growth of the GDP). The ratio between production and domestic demand in metallurgy, chemical, paper, and non-metallic minerals has been increased.

36. Some countries are particularly conscious of the limitations imposed by market imperfections upon the optimal use of their natural resources. In most of them natural resources such as minerals, water, forests and gas, are state-owned. Their exploration and exploitation are usually done by the public sector, or by Governments directly. In the exploration and refining or even in marketing, some countries that are short of financial resources, know-how and other organizational facilities welcome private participation—both local and foreign—and are shareholders in or promoters of these operations. Preserving the ecological balance, safeguarding the environment, and protecting the land against erosion are objectives which are closely linked to the proper and scientific utilization of natural resources. These objectives require the full attention of the Government. In some countries studies are being undertaken in these areas and task forces set up to analyse various aspects of these problems. Programmes for afforestation have been carried out to ensure continued or increased availability of forest resources which are essential to the manufacture of paper and cardboard and in a number of countries, to the furniture and other wood-based industries. In Colombia the National Code on Renewable Natural

Resources and Environmental Protection was enacted recently to safeguard the country's hydro-biological resources (forests, water resources, national parks, woodland fauna, land and soil) and ensure their national utilization. For instance, a total or partial ban has been declared on the felling of trees. Most countries are confronted with problems of deforestation, land erosion, waste of water resources and desertification. These are bound to affect their natural resources and, therefore, their industrial development.

37. New opportunities are now available to countries with long coastlines. New laws of the sea have given wider scope to fishing and marine studies. Many countries have reported that they have plans for reorganizing all activities related to fishery, including farming, processing, and marketing. Inherent in this is the future expansion of the shipbuilding and canning industries.

38. It cannot be overlooked that for various reasons natural resources in a number of countries have not received due attention. The potential for processing and export has not been sufficiently developed, and there has been no consequent increase in self-reliance. The importance of these resources in industrial development strategies was emphasized in the Lima Declaration and Plan of Action. Basically, most of the raw material producing and mineral-rich countries have set up industries to be fed by or linked with their local resources. The degree of processing and standardization for export differs from country to country: some countries seem to have taken significant strides in that direction; others are at an elementary stage of processing for home consumption or further processing for export. Countries which have acquired a dependable infrastructure and planning organization have been able to make fairly detailed projections of the availability, use and processing of their natural resources for various periods of time. Not all countries have, however, been so fortunate as to have reached a stage where they can comfortably embark on the planned exploitation of their natural resources. However, they are all seized with both the prospects and the problems. Distinct headway has been made in the processing of local raw materials for domestic consumption in a growing number of countries, whereas in some Latin American countries standards of excellence for several products have been attained in the export markets (e. g. meat, seafood, fruits, vegetables and food). In the textiles sector as well as in the leather and footwear sector, manufactures of export quality are also available in many countries of the third world. An important point here is that these countries with their large population are in themselves good markets for locally manufactured products. Since there is no dearth of local labour it should be possible to meet local demand with local production. Some countries, while reporting success of their plans to ensure that the basic requirements of domestic consumption are met, do not express optimism about a possible shift to high export performance. The reasons for this reservation include lack of expertise in high-grade processing, quality control and access to markets.

39. The representative natural resources of the countries also have certain inherent limitations. This is particularly true of mineral resources,^{6, 7} the

⁶ "Industry 2000 . . .", part II, chapter 8.

⁷ "World Industry since 1960 . . .", chapter VI.

potential of which is insufficiently known. Estimates of available reserves are often based on incomplete mapping. Even where mapping has been fully done, most estimates are as yet preliminary. Judicious rather than all-out utilization of non-renewable resources is necessary. The common economic view in many countries favours their maximum domestic use. Some countries say that they have a good basis for prospecting their mineral resources, including some in high demand internationally, such as oil and uranium, but they have yet to undertake the exploration of these resources.

40. Some countries seem to have taken effective measures for the regulated utilization of their resources, even to the extent of establishing forward linkages with the production of key and basic industries, import substitution and higher value added for export. Direct government investment, import protection, investment incentive, reduction or exemption of export duties and other measures have been adopted to reach that stage. In several countries steps have also been taken to develop hydroelectric and thermal power, biogas or natural gas.

41. In some cases local industry must be run on imported raw material. Either the local raw material is not enough to keep the industry fully fed or the country does not produce the raw material required for that industry. Meeting import substitution objectives or enhancing the export of manufactures in a particular branch of industry may in itself be justification for the use of imported inputs. On the other hand, there are countries which have put a complete ban on the import of raw materials that are already available at home. Malaysia provides fiscal and tax incentives to encourage labour-intensive, agro-based, export-oriented and regional development industries. A list of "priority products" has been approved by the Government, which is closely linked with the processing of raw material of local origin. As an illustration of the utilization of its natural resources, Malaysia cites tropical hardwood, of which it is an exporter, saying that wood is a versatile industrial raw material that can be used to manufacture a large number of products ranging from toothpicks and toys to building materials and boats.

42. Jordan has adopted a policy of encouraging the local processing of raw materials such as phosphate in the fertilizer industry and kaolin and feldspar in the ceramic industry. In Venezuela, mineral policy is geared towards exploration programmes and the development of local ore deposits with a view to increasing the degree of processing. A similar increase in sectoral self-sufficiency is also reflected in the measures being taken in Iraq to rationalize and make full use of its natural resources. In Jamaica, the Scientific Research Council has been able to uncover a number of local materials which can be exploited. Most of these materials have now reached an advanced stage of development, but they have yet to be commercialized. In Peru the evaluation of natural resources is being done at the highest level by an organization linked with the Office of the President of the Republic.

43. In the current plans of some countries, the use of domestic raw materials for industry is projected as high as 60 per cent, but it is also feared that present financial constraints which have affected the rate of the development of

some of their vital projects may prove to be a serious obstacle to the realization of that target. In other countries, large-scale and capital-intensive industrial projects have been initiated which are wholly or dominantly dependent on imported raw material. These countries express a great deal of optimism about the positive role of these projects in their overall industrial development. The projects have led to the increased utilization of such natural resources as energy, water, labour and building materials. In some of these countries capital-intensive and basic industries have been planned to provide mechanization and input support to the agricultural sector. In the absence of such inputs and mechanization, that sector would suffer from low productivity. Agricultural productivity both for consumption and industrial processing has to be increased through the provision of improved technology, adequate inputs, irrigation and power facilities. In India, certain measures have been taken to ensure a stable supply of natural resources which include the exploitation of domestic resources as long as production costs are competitive with import prices. It has also tried to secure long-term guarantees for resource imports by expanding overseas economic co-operation and promoting overseas investment in resource development. A series of geographical surveys have been planned for the current plan period. While steps have been taken to consolidate and modernize mining zones, programmes have been developed to promote resource-saving industries, expand stockpiling facilities and recycle waste materials.

44. In some countries prospecting for new raw materials is also being undertaken. In Yugoslavia, a significant base of metal raw materials (copper, aluminium, lead, zinc) has been created after recent exploration. In Romania, certain manufacturing industries which are large consumers of energy or raw materials are located close to the relevant natural resources. This may not be the case in many other countries where for various other reasons the proximity of industrial plants to the relevant raw material or natural resources may not be correlated.

45. In several countries, an elaborate legal framework is provided for the development of certain sensitive natural resources and their industrial use. Some countries are candid about their inability to ensure full and maximum utilization of their natural resources. They feel that unless uncertainties, especially in the matter of financing resource development projects, are resolved, no long-term projections of either agricultural production or of industrial development based on these projects can be possible. It seems that an increasing number of countries who had been exporting their processable raw materials such as cotton, jute, rubber, timber, and ore, have either started or are now exploring possibilities of processing these materials locally (Ecuador, Egypt, Guatemala, India, Indonesia, Malaysia, Nigeria and Thailand).

BUILDING UP OF TECHNOLOGICAL CAPABILITIES

46. Technology being the backbone of the national economic framework, any assessment of economic and industrial development should, by definition, involve searching analysis of the state of this art and of existing

measures to use this instrument of change and progress. Developing countries were asked to provide information on such components of technology as the development of technical training and research capabilities; promotion of technological information; adaptation, innovation and choice of technology; institutions related to the import of technology; and the development of domestic consultancy and engineering services.

47. A typical reply from one of the less developed among the developing countries reads: "No special agency regulates the inflow. No overall plan for the development of science and technology exists, nor have measures been taken so far to establish research capabilities or develop domestic consultancy and engineering services. No estimates of technical manpower needs have been made. The capacity of the educational system to meet these needs is limited due to the absence of any university or polytechnic high school." This statement could have come from any of several countries in which even today most of the population can neither read or write. On the other hand, many developing countries have not only a high literacy rate but also fairly advanced educational, research and development facilities. Thus, countries vary widely in their needs and capabilities in science and technology.⁸

48. In the Lima Declaration and Plan of Action emphasis is placed on the importance of the elaboration of national plans and policies pertaining to science and technology. The reports from a number of developing countries show that in recent years specific attention has been given to this matter through (a) the formulation of a science and technological development plan (Brazil, Guyana, Mongolia, the Republic of Korea and Venezuela); (b) the inclusion of a separate chapter on science and technology in national development plans (Ghana); or (c) the establishment of special bodies such as the National Council for Science and Technology (Colombia), the National Science and Technology Development Agency in Nigeria and the National Commission for Policy on Science and Technology in Panama.

49. In some countries, however, technology means no more than access to tools and machines suited to labour-intensive production. In these countries, farm machinery and repair workshops, milling and sawing equipment, electrical generators, water-works plants and motor-transport complete the list of urgently needed technologies. Others have been able to acquire advanced technologies as sophisticated as those used in highly developed countries. Between the two extremes there is a fairly large number of countries where technological development appears to be taking place, albeit at a slow pace. Some have no maintenance or servicing facilities and many are short of trained manpower and training facilities. Some that have means for technical training are confronted with the problem of the brain drain: after developing a large enough pool of persons qualified to work at middle and senior levels, they watch it steadily become depleted as a growing number of technicians and engineers find more lucrative opportunities abroad. Bangladesh specifically acknowledges facing such a situation. As long as the outflow of skilled persons continues, the technological bases of these developing countries will remain

⁸ Industry 2000 . . . , part II, chapter 7.

weak and static. The outflow has now assumed such proportions in many countries that corrective measures are being seriously considered. The situation is complicated by the fact that the skills-exporting countries are finding difficulties in restricting the outflow, which has become a substantial source of foreign exchange earnings. Nevertheless, on the supply side, measures are being taken to upgrade and enlarge educational and training facilities.

50. In some of the reporting countries the quality of graduates from existing polytechnic institutes, technical training centres and vocational institutes is fairly good and meets the requirements of the industrial sector. They have higher potentials, but a shortage of qualified teachers limits any significant achievement of it. In one case, by no means the worst, a school population of as many as 200,000 is reported to be served by a teaching population of barely over 7,000. However, it is encouraging to note that new educational policies in many of the third world countries place special emphasis on science and technology. Besides the setting up of educational and training centres and institutes to cater to the vocational needs of industry, research and design facilities are being provided or enlarged. In Bangladesh, for instance, the Government is working out an institutional framework for developing designing skills, while in Botswana the Product Design and Developing Centre and the Rural Industries Innovation Centre have been set up. However, these efforts fall seriously short of meeting domestic requirements. While many countries have established a comparatively modern industrial infrastructure, they have yet to create sufficient consciousness in the industrial sector of the need to develop training and research facilities. Soundly planned industrialization should generate original designing and development capacities. The information supplied by the developing countries shows that in the majority of them there is a high dependence on foreign technology, which though readily obtainable is often expensive.

51. Several countries do not have any record of the terms on which foreign technology has been acquired by industry or even of the terms of contracts between the local entrepreneurs and foreign suppliers. In recent years, however, national agencies have been established in a number of countries to regulate the inflow of foreign technology, register patents and trademarks, develop information on local and foreign technology, and promote research and development. Countries have promulgated laws regulating the flow and development of technology, its import and use. Plans have been undertaken to organize the entire field including training and education, with an eye to future requirements in this field. In Romania, it is expected that at the end of the current five-year plan 45 per cent of the total value of industrial production will be accounted for by new or improved products through research and development. In Cuba the encouragement given to the work of Cuban specialists in technological creation and innovation has resulted in the development and improvement of new technologies, equipment and processes.

52. In a number of countries where productivity is low—one tenth to one fourth of the level in industrialized countries—technology has to be so designed that it increases productivity in labour-intensive industries. Some countries have taken steps in that direction as well as towards developing indigenous designs

with a view to encouraging manufacture of domestic capital goods and minimizing foreign exchange expenditure. However, the results are not quick enough. In the new national plans of some of these countries the intention is to accelerate the pace of applied industrial research by emphasizing programmed and user-oriented research. The research problems that these countries face relate to practically every industry. Some countries are producers of heavy machinery and have even entered aeronautical and marine industries, thus making the acquisition of technology and the development of skills particularly critical. They not only have to operate their production lines, but they also have to improve industrial designs and the engineering capabilities of their installers. In some cases they have even to create their own designs. Even in these countries, a feeling of inadequacy prevails insofar as qualified manpower and the regular development of skills are concerned.

53. As for the importance of acquiring technological information and broadening technical education: (a) Mexico reports having made considerable progress after establishing an agency known as INFOTEC. This agency has gathered information on 95 per cent of world technological developments and is in a position to supply the information to industry. The country has adopted a policy which it calls "technological self-determination", implying freedom of decision in the search for, and in the selection, negotiation, utilization, assimilation, adaptation and generation of, technology; (b) In Peru, it has been decided that every industrial enterprise shall deduct 2 per cent of its net earnings for utilization in scientific and technological research for industry. Such measures, it is evident, are necessary to induce industry to incorporate R and D as an essential element in its normal activity. Government initiative of this kind helps to motivate the private sector; (c) The Republic of Korea has reported on an interesting experiment: "Science Town", under construction since 1973, is being created to apply technological capability effectively to the economic benefit of the country. New strategic industry research institutes are to be located in that town, with the expectation that the environment would be conducive to interdisciplinary research and the development of a system in which an intellectual community of research institutes and universities would grow.

54. In several countries, especially in Asia and Latin America, the development of national research capability is well institutionalized. The numbers of technicians, scientists, engineers and other professionals essential to their economic development have been calculated and specifically projected. However, like the less developed countries, even these comparatively more developed countries have also expressed concern over their inadequacies, gaps and shortages in this respect. This is notwithstanding the fact that these countries have a growing number of educational institutions of all categories and levels, well-equipped, internationally recognized and respected universities and research academies, facilities of foreign training for their nationals, well qualified and experienced consultancy and engineering services, and an institutional framework for overseeing, regulating and planning the acquisition and development of technology and research.

55. Brazil has several agencies that are responsible for promoting the

development of technology including an autonomous federal agency that executes the related legislation. It has sufficient trained manpower. Brazil reports, however, that although a number of measures are being taken to establish a reasonable balance between its technology requirements and its purchasing process in the world market, it has not been able to establish a uniform policy. In Morocco no national institution manages or regulates the transfer of technology. The Government encourages enterprises to purchase up-to-date technology and provides easy arrangements for the transfer of foreign exchange to pay for the services of foreign companies. Similarly, in Nigeria at present various industries independently seek foreign technology meeting their requirements. In Latin America, the decisions of the Andean Pact are generally followed in introducing laws to increase governmental powers and strengthening negotiating positions in matters relating to the acquisition of technology. Colombia has laid down general criteria governing the introduction of foreign technology. These include considerations such as generation of employment, greater utilization of local natural resources and skilled manpower, environmental conservation, positive contribution to scientific and technological development, and the promotion of exports. Mexico takes special care to avoid duplication of research. Guatemala reports "the degree of dependency on foreign countries is indicated by the fact that more than 1,000 patents are registered in the Industrial Property Registry Office, and this represents an obstacle to the expansion of the industrial sector". According to Guatemala's own estimates, more than 12 million quetzals were transferred abroad between 1972 and 1976 for payment of royalties for the use of foreign technology. Guyana acknowledges an element of monopoly in the prices charged for imported technology and concedes that regulations can do little to mitigate this problem.

56. In a number of third world countries, measures are being introduced to facilitate the transfer and development of technology to suit industrial strategies and development plans. They are making laws which may ensure satisfactory arrangements for royalty payments. Governments are actively participating in the study and determination of their technological needs. Technology is being obtained after exhaustive negotiations by the parties concerned, often helped and guided by the Governments. Where necessary, domestic consultancy firms are being merged into large, viable firms. Sectoral research institutes are being established. On-the-job training facilities are being encouraged. Incentives are being introduced to attract foreign investment and participation. Technological information offices are being created. Science commissions and councils are being formed. Co-operation with other countries of the region in research programmes of common interest is being sought. All these measures are helping to produce a steady inflow of technology in these countries. Several Governments have decided that preference be given in large-scale government programmes to utilizing and developing the domestic engineering services. Among them are Brazil, Colombia, Ecuador, Indonesia, Malaysia, Panama and Tunisia. In Sri Lanka, research programmes will be more closely aligned to the needs of industry, the use of local resources and the development of indigenous technology.

57. The convening of the United Nations Conference on Science and Technology for Development in August 1979 is a reflection of the growing concern for the development of technical capabilities in the developing countries.⁹ More and more countries, in particular the more advanced developing countries, seem to be adopting a strategy based on a selective approach to the acquisition of technology coupled with an emphasis on the strengthening of indigenous capabilities for technology development and adaptation. That, however, does not mean that the less advanced countries are not conscious of the need to build up technology within their limited resources. They are concentrating on areas of immediate concern to their resource endowment and industrial capacities. They are thus trying to build up their indigenous technological capability from a longer perspective. A typical example is that of Ethiopia, which has established the Science and Technology Commission to chart a policy appropriate to the state of development of the country.

58. Even though only a few countries in the third world have achieved significant progress in the field of development and adaptation of technology, it is clear that increased attention is being given to priorities and selectivity in the planning and formulation of national R and D. This is being done to ensure that efforts are directed towards activities of maximum potential benefit to the countries. However, there is a danger, implicit in some of the responses, of spreading R and D efforts too widely. Where suitable, the emphasis in individual countries can be placed on pursuing R and D *in depth* in specialized institutions, such as the Central Leather Research Institute in India, the Rubber Research Institute in Malaysia, and the Sugar Industry Research Institute in Mauritius. For any country, particularly a smaller country, it seems advisable to select a few development areas of high priority and make every effort in those fields so that scarce R and D resources are optimally utilized.

⁹ In this connection see the background document prepared by UNIDO for UNCSTD: "Strengthening of technological capabilities of developing countries: A framework for national action." (A/CONF. 81/BP/UNIDO).

II. International Co-operation

59. When the Lima Declaration and Plan of Action, the International Development Strategy for the Second Development Decade and the resolutions of the sixth special session of the General Assembly concerning the New International Economic Order were adopted, they did not have the unequivocal support of the entire international community. But now, an encouraging trend can be discerned in the replies of the developed countries which had previously had reservations on the targets and other specific aspects of those pronouncements. Those countries that have not formally withdrawn their reservations now support the International Development Strategy and "share many of the aspirations of the Lima Declaration and Plan of Action". They are prepared to take "a constructive part in implementing activities and programmes to reach mutually agreeable objectives in the industrialization of developing countries". They regard the resolutions of the General Assembly as an expression of the political will of the international community to work together towards the establishment of a more balanced and just international economic order.

60. Some industrialized countries report that they have reached or exceeded the targets for official development assistance (ODA).¹⁰ That testifies to their willingness to respond to the stipulations of the General Assembly resolutions and to their own initiative in implementing these objectives. From the replies it can be detected that there exists in a few industrialized countries a genuine desire to contribute positively towards the promotion of the economic independence and industrialization of the developing countries.

61. In their replies, industrialized countries place emphasis on the basic needs programmes for the healthy and dynamic growth of the third world countries. The point is made that the satisfaction of the basic needs of the disadvantaged should become the core of all development efforts. The need for greater emphasis on training and employment questions has also been stressed (Finland). It was also felt that, in an open international economic system, co-operation in the spirit of partnership between all concerned offered the best chance of coping with the problem of balanced industrialization of the

¹⁰ Sweden reached its target for ODA/GNP ratio of 1 per cent in 1975, and Denmark reached its target of 0.7 per cent in 1978. Austria reached 1 per cent for the first time in 1977 in respect of both official and private assistance. Also see annexes III and IV.

developing countries (FRG). China reports that, given the urgent desire of some developing countries to meet their people's day-to-day requirements, it has mainly launched small and medium-sized projects in the light industry sector in its technical co-operation programmes with these countries. However, China has also assisted in constructing a number of large and heavy industrial projects in the third world.

62. Some CMEA countries, while listing their co-operation in the field of industrialization of the developing countries and the establishment of the new international economic order, stress the need to reduce military spending and to divert some of the funds thus released to the industrial development of the developing countries. The process of *détente* is considered an active factor in the development of economic relations and co-operation between countries with different social and economic systems. Under conditions of stable peace and abstinence from the use of force as an instrument of foreign policy, the developing countries, it is felt, enjoy a greater opportunity (and security) to implement the complete reconstruction of foreign trade mechanisms and industrial development (Bulgaria, Byelorussian Soviet Socialist Republic, German Democratic Republic, and Ukrainian Soviet Socialist Republic).

ESTABLISHMENT OF INDUSTRIAL CAPACITIES

63. The questions asked of the industrialized countries about the establishment of industrial capacities in the developing countries covered such topics as the progressive transfer of productive capacities (including industrial investments) to developing countries, structural adjustment policies, the production of synthetics, measures to encourage subcontracting and the follow-up to the UNIDO System of Consultations. The developing countries were invited to provide information on issues related to external resource requirements.

64. The establishment of industries in the developing countries by way of "progressive transfer of productive capacities which in the long-term would be less competitive in the developed countries and could promote a higher degree of local utilization of natural and human resources in the developing countries" is highly complex and involved. The issue has aspects of both confrontation and co-operation. The needs of the third world have yet to be co-ordinated with the spectrum of policies related to structural adjustments in the industrialized countries. In urging the developed countries to support the developing countries in establishing industries and to grant access to developing country products to markets in the developed countries, the Lima Declaration and Plan of Action is stressing the responsibilities of the international community for improving the uneven pattern of industrial development in the contemporary world. When replying in this context, most of the industrialized market-economy countries stressed that foreign private capital flows and investment played an important role in the economic development process through the transfer of resources, managerial and administrative expertise and technology to the developing

countries, the expansion of productive capacity and employment, and the establishment of export markets. These sentiments were, as noted by some of the countries in their replies, in accord with the sentiments prevailing at the Conference on International Economic Co-operation (CIEC) held in Paris in 1977.

65. It would appear that regional and subregional groupings of developing countries and the formation of producers' associations have improved the developing countries' position for the purposes of international dealings in trade and industrialization. Subregional integration schemes are proving conducive to concrete industrial co-operation in a number of countries, particularly in Latin America where trade preferences have helped to expand and diversify exports of manufactures and non-traditional items. In a global context, the importance of this trend is only symptomatic. However, the fact that it is happening in countries so diverse in their outlook and interests, traditional and historical associations, cross-currents of political and social trends and levels of economic development is in itself a noteworthy feature—all the more so because any movement in that direction is in keeping with the Lima objectives.

66. A number of developing countries have devised a wide range of incentives to attract foreign investments, including joint industrial ventures. A rule of thumb regarding equity participation is that a 51 per cent local participation is preferred to safeguard national interests. In order to ensure these interests, some developing countries have elaborated regulations for foreign participation in their industry including specification of industrial branches where foreign participation is or is not permissible, the extent of equity participation, incentives etc. Proposals for foreign equity participation are examined very carefully and are only approved when all the aspects and implications of such participation have been thoroughly evaluated. By way of example, it is the pronounced policy of one country that foreign investment is permissible only on such terms as are determined by the host Government to be in the national interest. In areas where foreign technology and know-how are not needed, ongoing foreign collaboration is not renewed. That may be quite legitimate, but the fact that pointed reference was made to it is worth noting.

67. On the other hand, some developing countries have practically no restrictions of any kind on the inflow of external resources, foreign investment and direct collaboration in any field of industry. Private investment codes are provided with a number of fiscal and other incentives to investors from abroad. In these countries, investment promotion programmes are quite elaborate and consist of sending investment promotion teams and missions to capital exporting countries, establishing overseas investment offices in those countries, using elaborate publicity and advertising campaigns in international media, disseminating information on investment climates and industrial opportunities, organizing regional consultations, collaborating with international agencies, employing investment consultants in developed countries and enacting liberal investment laws and regulations pertaining to repatriation facilities, remittances of profits and dividend incomes, tax allowances, depreciation and other reliefs. Furthermore, export processing free-trade zones are being set up in a number of countries to help increase the production of manufactured goods. Some

countries provide legal and constitutional guarantees against nationalization of industries and promise to pay adequate compensation to private investors in the event of nationalization.

68. Some developing countries have clearly identified industries in which foreign capital is particularly encouraged, and special facilities are extended to foreign investors. These areas include capital and technology-intensive as well as export-oriented industries. In a number of countries where an adequate institutional framework of investment and credit facilities in the field of development has been established, official and private credit and investment organizations are active and resourceful in obtaining adequate support from their promoters and Governments. They are encouraged to revise their lending policies so as to accommodate economically, financially, and technically sound projects, more favourably than the quality of collateral that can be provided by potential borrowers. There are also instances of technical documentation on industrial projects being circulated widely in capital-exporting countries. Direct negotiations, bilateral and multilateral agreements and sectoral studies are other forms of investment promotion carried out by some countries. Many countries report that they do not discriminate in any way against foreign investors and do not grant any unfair advantages to their nationals which may jeopardize the interests of foreign investors.

69. While external capital requirements in the developing countries are growing and the implementation of the Lima Declaration and Plan of Action requires massive flows from developed to developing countries, the availability of funds is shrinking owing to unfavourable economic conditions in the North where corrective measures have come up as an additional demand on Northern capital resources. Furthermore, a degree of weariness with the concept of aid is still prevailing, while concern is growing about other forms of financial flows and the security of investments in developing countries. Many developed countries have taken steps to provide legal guarantees against political risk for the direct investments of their nationals and institutions in foreign countries. These guarantees have yielded encouraging results in some OECD countries. By the end of 1977, the Federal Republic of Germany, which favours direct private investment in a spirit of partnership in the developing countries, had recorded an outflow of private investments to those countries amounting to about 30 per cent of its total direct investment abroad. Special tax incentives have been allowed to persons investing in the least developed countries. Similar measures have been reported by other developed countries.

70. Many developed countries not only expect developing countries to indicate clearly the terms and conditions under which foreign investment would be welcome, but they also insist on non-discrimination between foreign and domestic investments and fair compensation in case of nationalization. They advocate the importance of a positive investment climate. No doubt, genuine efforts are being made in several countries in the North as well as in the South to improve the climate, but much remains to be done by both. Some countries in Europe have taken positive steps to encourage their private investors to seize opportunities in the third world. Of their own accord, some of these countries have allocated special funds as guarantees against non-commercial risks. In

Norway, the guarantee scheme for private investments abroad has been in force since 1964. The Government of Switzerland during the period 1970-1977 provided a 70 per cent guarantee on a sum of 112.6 million Swiss francs of Swiss investment in developing countries. Furthermore, the integration of Swiss investment projects in the development plan of the host country is one of the conditions for granting the investment guarantee. Switzerland has concluded bilateral agreements with 33 developing countries aimed at the protection and promotion of direct Swiss investments. This illustrates the possibilities of securing satisfactory investment arrangements in the developing countries through bilateral negotiations.

71. In recognition of the importance of industrial development in the third world and of the Canadian private sectors' potential to assist it, Canada's Industrial Co-operation Programme is being expanded. Under this programme, support is given to project identification, feasibility and prefeasibility study activities for the purpose of encouraging Canadian firms to establish or expand operations in developing countries through Government ventures or other forms of business co-operation. The Canadian private sector is encouraged in its understanding of, and ability to relate to, industrial co-operation opportunities and in improving the industrial development environments of selected developing countries. Basically, the least developed countries are eligible for consideration under this programme although activities have so far mostly centred on the middle-income developing countries. In order to facilitate the transition to a less protective trading environment in the coming decade, several policies in Canada are designed to assist in the structural adjustment of industry.

72. Some developed countries have special soft loan schemes for enterprises wishing to establish manufacturing units in developing countries.¹¹ In Austria, this scheme operates at the middle entrepreneurial level. In recent years, Austria has also facilitated the import of developing country manufactures into the Austrian market. Some Austrian industries have moved into the developing countries, while Austrian industry at home has shifted to other lines of production. Austrian research institutes are studying the country's international competitiveness in certain branches of industry in the context of the international division of labour. Belgium has an international investment corporation with a 51 per cent public holding to promote investment in developing countries. Some important fiscal measures have also been introduced to encourage industrial investments abroad, with no restrictions such as exchange controls governing investments in foreign countries. In Finland, interest in investment promotion in the developing countries is also increasing. For instance, Finland in conjunction with UNIDO, recently co-operated with selected developing countries in the establishment of joint industrial projects with particular reference to the metalworking and wood-processing industries.¹²

73. In Japan, a number of private and governmental organizations are operating in the field of industrial investment in developing countries. Joint

¹¹ See *Financial Resources for Industrial Projects in Developing Countries*.

¹² See annex V for summarized information provided by the developed countries on measures taken to encourage investments in developing countries (column 1).

ventures are being encouraged by the Overseas Development Organization which advances interest-free loans to set up small and medium-scale ventures in developing countries. From April 1978 all that is required for direct investment from Japan is a notification to the Bank of Japan. In the Netherlands, interest has been shown in industrial investment in developing countries. The country has entered into economic co-operation agreements with 19 developing countries and has created a budget line to provide financial assistance to industries which are no longer viable in the domestic environment and should be shifted to developing countries to avail themselves of the economic advantages available there.

74. The United Kingdom of Great Britain and Northern Ireland recognizes that establishing industrial capacities in developing countries is one area of the North/South dialogue that "has the potential to offer gains through the operation of comparative advantages to both developed and developing countries". Its policy has been to encourage its entrepreneurs to establish new processing plants in locations where it is economic to do so on account of lower capital and running costs. The industry of the United Kingdom has a long history of adjustment to changing patterns of world trade and industrial development. As a result of its experience over a number of years, it has developed a comprehensive set of policies to facilitate the structural adjustment of industry to changes in world competition.

75. Most of the developed countries report that in their strategies and industrial policies they always incorporate an element of structural adjustment, which, being a continuous process, fits into their economic framework. The Federal Republic of Germany recognizes structural adjustments in industry as a prerequisite for comprehensive economic growth and greater participation by the developing countries in the international division of labour. The Government in that country regards practical structural adjustment measures primarily as a matter of concern to the private entrepreneur. At the policy level, problems related to social hardship have to be tackled and weighed against the costs of protecting non-competitive branches. The Netherlands believes that adjusting industrial structures to changing circumstances is the responsibility of the industry. In this context, increased emphasis has been laid recently on general measures that generate adjustment activities on a rational basis.¹³ Countries also favour participation in subcontracting schemes wherever opportunities to join these schemes at a comparative advantage present themselves. Industries are said to be growing increasingly conscious of the new factors and to be framing their policies in the light of opportunities and facilities available outside their existing locations. The French Government points out that industrial redeployment must not be interpreted as meaning the abandonment of whole industrial sectors. A more refined approach is advocated. It says that within these sectors possibilities for specialization always exist which can be profitable to the developed countries.

¹³ See annex V for summarized information provided by the developed countries on policies relating to structural adjustment in industry (column 2).

76. The contribution of the centrally planned economies towards the establishment of industrial capacities in the developing countries has also been substantial. Czechoslovakia has participated in the establishment of some 60 industrial plants in India providing employment to around 100,000 workers. In its reply, Czechoslovakia describes in some detail the establishment of similar units in a number of developing countries throughout the world. From the German Democratic Republic as many as 570 factories and complete industrial plants have been delivered to developing countries since 1955. Another 80 projects were under construction in 1978-10 of them in the least developed countries. All 80 projects belong to the heavy and basic industrial sector. The German Democratic Republic has co-operated with other CMEA countries in setting up cement factories in a number of developing countries. In Hungary increasing Hungarian participation in the international division of labour is generally advocated. Hungary has participated in the establishment of industrial plants in some developing countries, both for light and heavy industries, and it delivers know-how and technology to a number of countries.

PRODUCTION OF SYNTHETICS

77. The foregoing analysis indicates not only that the possibilities of the restructuring process and its advantages are appreciated but also that some measures have been taken wherever possible by industrialized countries in this field. However, these measures are far behind the dynamics of desired change in terms of their scope, intensity or speed. In this context, it should be recalled that in the Lima Declaration and Plan of Action emphasis is placed on the developed countries' adopting and implementing measures which may establish a balance favourable to developing countries between the production of synthetics and the competing natural products of the developing countries. In this regard, the nearest the developed countries say they can come is not to provide government subsidies to private companies establishing units producing synthetics. The British Government for instance reports that no official assistance schemes in the United Kingdom are aimed at encouraging manufacturers to produce synthetics in direct competition with natural products from the developing countries. The country has encouraged an orderly growth of processed raw material imports, recognizing their importance to developing countries and the need to allow domestic industry time to adjust to the rapidly expanding competition. Czechoslovakia and the Netherlands have given specific examples of processing industries which have been phased out. Czechoslovakia prefers to import traditional jute products from the jute-growing countries rather than importing raw jute for further processing. On the other hand, the Economic Commission for Africa has noted in the particular context of the Lomé Convention that no real efforts have been made so far to assist the ACP countries in the processing of their raw materials for export or local use. Norway reports that in its industrial policies it will take into account the concern of the developing countries about their natural products and the threat posed by

synthetics from developed countries. The United States of America has also indicated that the Government is willing to consult with developing countries about areas of product research and development and trade promotion.

SYSTEM OF CONSULTATIONS

78. The role of the industrial consultations organized by UNIDO is referred to in the replies. These consultations are regarded as a means of gaining insight into the existing distribution of production and the forces that affect adjustment measures and possible co-operation agreements between developing and developed countries. The contribution of the consultations towards enabling the participants to learn about the changes which will occur in the production structure has been acknowledged (ID/CONF.4/6). The United Kingdom specifically mentions its own positive role in international discussions on the industrialization of developing countries and in that context refers to the System of Consultations, in particular in the field of leather and leather products and iron and steel, which it considers were a useful forum for encouraging co-operation agreements and joint ventures between developed and developing countries. Although the United Kingdom reply does not give a formal analysis of possible areas of co-operation as such, it assures that specific topics are being examined by working groups attended by experts. The British Steel Corporation is playing an active role in some of these groups. The British Government has also developed a comprehensive set of policies to facilitate the structural adjustment of industry to changes in world market conditions. These policies recognize the need for adjustment to competition from other developed and developing countries. Austria also acknowledges the impact of the system of consultations on policy formulation in the participating countries. France has noted the importance of the UNIDO system which generates and promotes discussions of a technical nature. The French Government feels that these discussions can contribute to promoting a harmonious distribution of world production.

79. The organs and enterprises of the Hungarian Government have actively participated in all sectoral consultations organized by UNIDO. As a result of the first consultation on the fertilizer industry, the Hungarian Government offered to organize the training of some specialists in Hungary. The United States Government reports that it has modified its policy regarding the System of Consultations after the tenth session of the UNIDO Industrial Development Board where it was agreed that consultations among member countries should include representatives of any or all of the following: government, industry, labour, consumer groups etc. The United States Government feels that the broader base participation in the consultations is helpful and introduces an element of realism into the process. Most of the private sector participants from the United States have found the consultations worthwhile, and many have been working actively with UNIDO in follow-up activity. A number of developing countries have also indicated interest in international co-operation in various industrial sectors as a follow up to the consultation

activities.¹⁴ Gambia, Ghana, Indonesia, Malawi, Nigeria, Oman, Panama, Papua New Guinea, Somalia, Togo, United Republic of Cameroon, and Zaire made particular mention of their respective areas of interest.¹⁵

FINANCIAL AND TECHNICAL ASSISTANCE

80. Information was requested from the developed countries on financial and technical assistance to the developing countries. The questions were related to the flow of resources from the developed countries, their direct investment promotion programme for developing countries, in particular the least developed countries, and the areas of co-operation.

81. Some developed countries are now tending, to an increasing degree, to channel their development aid to developing countries through international agencies (annex IV). In 1978, Iceland's total development aid contribution went mainly to UNDP, the World Bank and joint Nordic projects in some countries of Africa. Similarly Finland's contribution to international agencies amounted to \$ 22.2 million in 1976 and \$ 21.9 million in 1977, while the 1978 budget provided for an increase in aid appropriations of about 30 per cent over the previous year. Denmark is the largest donor to UNDP in terms of *per capita* contribution and provides 10 per cent of the programmes' total UNDP resources. The overall grant component in French assistance amounts approximately to 94 per cent. A little more than half of its official assistance to the least developed countries has gone to the four countries of the Sahel, namely, Chad, Mali, Niger and Upper Volta. For the first time, France has now included a priority action programme specifically relating to scientific and technical co-operation with developing countries.

82. While acknowledging the positive contribution of foreign capital to their industrial development, the developing countries are, by and large, concerned with its inadequacy and unfavourable terms. In general, all developing countries seek a re-organization of the flow of external resources in terms of volume and quality. Countries whose industrial growth target is closely linked with the expected inflow of foreign capital are not only concerned about its availability, but also about the terms and conditions attached thereto so that the benefits accruing from industrialization are not offset by the burdensome undertakings imposed by foreign capital.

83. Some developing countries have not been able to make estimates of the external resource required for their industrial plans. Clearly, since their plans are elaborate and they have used much foreign capital in the past, their current and future requirements of external resources are likely to be quite large. These countries include those which have reached a higher level of industrialization. Most other countries have estimated the total investment costs of their proposed industrial plans and have a fair idea of their external resource

¹⁴ An average of between 50 and 60 countries—both developed and developing—have participated at each consultation meeting held so far.

¹⁵ See ID/CONF.4/6 for more detailed information on the system of consultations.

requirements during their plan period. In some cases, the estimates have been worked out in the form of expected percentages from various financing sources, such as the commercial banking system and the development banks. Some countries, especially those from Latin America, appreciate the growth of confidence shown by the international financing circles in their industrial programmes. They are therefore able to contract foreign loans on relatively favourable terms. It seems that because of the insufficiency of ODA for their needs, developing countries are using commercial banks to an increasing degree to obtain finance for their development projects. The case of Colombia can be cited as an example of the use of foreign loans for industrial development. Colombia reports that in the technological research and small-scale industry, 18 per cent of the planned investment will be obtained from the national budget while the remaining 82 per cent will come from other sources. The loans that have already been signed for this programme are: with the Inter-American Development Bank and the Agency for International Development in 1975, with the Federal Republic of Germany and the World Bank in 1977 and one which has recently been negotiated with the World Bank for the development of the Cartagena Free Zone. In countries where the level of domestic savings cannot be raised (a common problem in the inflationary years after 1974), dependence on foreign financial support is increasing. Some of the countries in which remittances from their nationals working abroad have assumed a vital role in the economy have set fixed targets for the future inflow of these remittances. They have even incorporated them in their sectoral allocations. In addition to their efforts to encourage an increase in the remittances, these countries are trying to promote increased inflow of industrial machinery and plants which their nationals bring in when repatriating their savings from abroad. The International Monetary Fund Trust Fund established in 1976 provides additional concessional payments to the developing countries wishing to adjust their balance of payments.

84. Whereas the flow of external resources has generally decreased, some countries, e.g. Chile, acknowledge an improvement in direct foreign investment in 1978, particularly in the manufacturing sector. In one Latin American country as much as 69 per cent of the amount authorized for direct foreign investment is directed to the manufacturing sector. At the same time, some countries are not certain as to the extent to which they can rely on direct foreign investment in meeting their envisaged capacity increases. For example, it has been estimated that Ethiopia will require investments of over \$ 500 million to establish its most urgently needed industrial projects in the next five years. The country is mobilizing domestic investments to meet these requirements, but it is also looking for bilateral and multilateral sources of funding, which it is finding hard to attract.

85. In their national development plans some countries have set themselves the laudable objective of financing their development entirely from domestic resources. In Guatemala the national banking system had, by 1976, contributed 31 per cent to its domestic financial sources and in that year also, financing for the industrial sector grew more rapidly than total financing. In some countries, direct foreign investment in industry is either partial or total,

depending on the merits of the case. In certain instances, suppliers provide substantial credit for the purchase of machinery, equipment, raw materials and intermediate products. In Guyana, which would need to secure 58.2 per cent of the total investment needed for its proposed industrial projects from abroad, a vigorous programme has been launched to promote foreign investment. The Ivory Coast reports that for the period 1976-1980 50 per cent of investment in the private sector of industry and 75 per cent of that in the public sector will have to come from abroad. In the case of Kenya, the corresponding figure is 60 per cent of the projected total investment in industry.

DEVELOPMENT OF INDUSTRIAL TECHNOLOGY

86. Governments and international organizations concerned were asked what progress they had achieved with respect to the international code of conduct for the transfer of technology, the state of international co-operation in technological research, and the flow of technological information.

87. The views of the developing countries regarding their needs and problems in connection with the acquisition and development of industrial technology have been discussed earlier. Views on the subject have also been expressed intensively in various international fora. Despite the universal desire to redeem the situation, progress has been slow for lack of effort. General Assembly resolution 3362 (S-VII) leading to UNCTAD resolution 89(IV) has been endorsed by almost all countries of the North as well as the South, and consensus was reached regarding the follow-up machinery for implementing the code of conduct for the transfer of technology. Despite the divergence of views about the degree of emphasis on the various aspects of the proposed code, and on its nature, authority and scope, there is hardly a country today that does not recognize the urgent need for such a code of conduct. Some developed countries feel that the code should be based on the principle of voluntary application and that time and experience should prove its effectiveness. Some have suggested that the effectiveness and relevance of the code should be regularly reviewed. As for intergovernmental negotiations on the formulation of the code, almost all developed countries express views that are substantially in harmony with those of the developing countries: the negotiations should not only aim at increasing collaboration at the global level in technology transfer, but they should also identify and define the standards to be applied to that transfer. In the long run, international understanding of the legal framework will be, they hope, conducive to a smoother flow of technology between North and South. It will also help to provide minimum protection to the buyer of technology. A protection-oriented approach is acceptable to both North and South. Some countries insist that the code of conduct should be of a mandatory character; only then would it constitute the means of correcting certain abuses in the field of technology transfer. These countries feel that it is the only means of safeguarding the interests of all parties concerned.

88. Some countries express an urgent need for measures to control the activities of transnational corporations in the field of technology and to prevent

brain drain. They do not advocate that every form of technology be transferred to the developing countries. The German Democratic Republic reports that it chooses technologies appropriate to the possibilities and wishes of the recipient countries. This principle also applies to the choice between modern integrated production units and small industries. The Italian Government expresses its readiness to provide a flow of pertinent technological information to the developing countries. However, it feels that this flow is not likely to be regular because the information has to be supplied at the request of the parties concerned, while the nature and substance of the information may vary from country to country and case to case. Between 1973 and 1980 Japan identified 18 industrial research themes in half a dozen South-East Asian countries. Several developed countries have promoted co-operation in the field of industrial research in domestic and foreign institutions and have been building up local research capacities in developing countries. The Netherlands has a variety of such themes, and the Netherlands Foundation for Technical Development for Developing Countries (TOOL) acts as an intermediary between research institutions in developing countries and the technical universities in the Netherlands for the dissemination of knowledge. The technology transfer programme set up by the Netherlands is largely education-oriented, supported by practical training at the grass roots level. In 1977 the Netherlands set up the Advisory Council for Scientific Research on Development Problems (RAWOO) in order to stimulate co-operation in the field of development-related research between the Netherlands and developing countries. China reports that hitherto it has accepted more than 50,000 trainees from over 20 countries who have acquired from China different professional skills through which they are contributing to the development of technology in their respective countries.

89. Among the initiatives which some developed countries have taken recently are these: (a) Since 1976 arrangements have been made between various ministries of the Federal Republic of Germany to orient the Government's R and D potential towards meeting the requirements of developing countries, particularly those of the poorest sections of their population;¹⁶ (b) The United Kingdom believes that the developing countries should be in receipt of as much information as possible when they come to decide their industrial and technological requirements. It has supported work towards the establishment of an industrial and technological information bank by UNIDO and will be examining the results of the pilot scheme, covering four sectors: iron and steel, fertilizers, agro-industries and agricultural machinery; (c) In 1977, the United States launched Appropriate Technology International to work for the technological needs of the private sectors of developing countries.

90. During the last few years a substantial amount of work has been done in this area at the country, regional and global levels, actively supported by

¹⁶ See annex V for summarized information provided by developed countries on R and D programmes in developed countries specially oriented for developing countries (column 3) and technological information facilities (column 4).

UNIDO and other international organizations.¹⁷ A regional centre for the transfer of technology in the ESCAP region has been established at Bangalore, India. In addition, a regional network for agricultural machinery has been set up in this region to organize and co-ordinate continuous research and development activities within the framework of the existing specialized national research institutes. In 1975, the Third Conference of African Ministers of Industry endorsed a proposal for the establishment of a regional centre for the transfer, adaptation and development of technology in conformity with the Lima Declaration and Plan of Action. Furthermore, ECA is making preparations for an African Regional Centre for Industrial Design and Manufacturing as well as an African institute for higher technical training and research. It has been examining the possibilities of non-formal education for industrial development and the establishment of national and subregional indigenous consultancy and contracting associations. Similarly, ECLA has been co-ordinating the activities of the transfer of technology and technological development in Latin America with the Inter-American Development Bank. Within UNIDO the Industrial and Technological Information Bank (INTIB) is a service that addresses itself to helping the developing countries in their selection of suitable technology.¹⁸ It is a component in an overall network for the exchange of technological information. Preparations towards such a network are being carried out by the United Nations Office for Science and Technology (UNOST). UNESCO, under its UNISIST programme, is assisting developing countries in the establishment of their information infrastructure. In the field of agro-industrial development, regional networks of development, research, training and technology transfer have been established by FAO. Other bodies in the United Nations system such as the Centre for Natural Resources, Energy and Transport are working on energy surveys and evaluating sources and their development. WIPO is reviewing the working of patented inventions and related aspects. It has selected four key sectors as priority sectors and hopes that its efforts will inspire a favourable innovation climate in the developing countries. As far as the revision of the Paris Convention on Industrial Property is concerned, WIPO reports that the intergovernmental committee working on the matter has virtually completed the preparatory substantive work.

91. Some developed countries report that they have also initiated search services within the framework of WIPO for the acquisition of technology in the South. The International Patent Documentation Centre (INPADOC) has been set up in Austria. Denmark is active in this field within its Industrialization Fund for Developing Countries. Almost all developed countries advocate an institutionalized function of this nature for the collection of information. However, seen in the context of global needs and requirements and in relation to the enormous gap that exists in the developing countries in the field of industrial technology, all these efforts fall far short of the needs. International

¹⁷ At the global level, the Netherlands Organization for Applied Scientific Research among others, extended support to the World Association of Industrial and Technological Research Organizations (WAITRO) which aims at encouraging industrial research through the provision of linkages between member institutions in industrialized and developing countries, and through the arrangement of training programmes.

¹⁸ See ID/B/226.

endeavours have to be seen together with national measures, if a general idea is to be obtained about the state of technological development in the South, and whether efforts hitherto are commensurate with the industrial development goals set in the Lima Declaration and Plan of Action and in the Programme of Action on the Establishment of a New International Economic Order.

INTERNATIONAL TRADE

92. On the subject of international trade, the questions were related to the developing countries' export prices and terms of trade, measures of control over marketing and trade, bargaining power of raw material producers, expansion and diversification of exports, and the reduction and removal of trade barriers.

93. In the field of international trade, the basic objective of the Lima Declaration and Plan of Action is the expansion and diversification of manufactured exports from developing countries. Developed countries are urged to eliminate the tariff and non-tariff barriers and other trade obstacles. Several other measures are also suggested for granting developing country manufactures and semi-manufactures preferential access to international markets.

94. From the replies of the developing countries some definite trends can be observed in the amount of the manufactured goods these countries can and will be able to export to the developed countries, although no exact quantification is possible. The same reservation applies to the extent to which the developed countries can and will be able to absorb imports from the developing countries. It would appear that some developed countries have taken positive steps to follow the guidelines set in the Lima Declaration and Plan of Action in respect of international trade. However these efforts have for the most part been isolated instances and most frequently bilateral in nature.

95. Whereas the Lima Declaration and Plan of Action related primarily to the export of manufactures from the developing countries, the short-term problems are rooted in the unstable export prices of and uncertain demand for raw materials and primary products. Developing countries are under such pressure that most of the time they are engaged in searching for buyers of their raw materials in the international market. Many such countries are virtually single-crop or single-commodity economies: they suffer most at the hands of both man and nature. In every adverse situation (fluctuation in prices, unusual change in climate, economic havoc, natural disaster) these countries are always the first and worst victims. Their raw materials are widely varied. Ordinarily these products should have been a source of strength to the producing countries, yet in most cases they are their constant worry. Even where export performance has improved, the volume and cost of necessary imports have increased, often at a higher rate, creating an ever expanding adverse gap in their balance of trade. Most countries have reported staggering trade-gap figures despite the appreciable growth in exports—particularly of manufactures. Besides their concern

over the balance of payments, the developing countries are also constantly harassed by market instabilities and persisting price manipulations in international trading circles. Several Governments are virtually paying their exporters huge subsidies to boost their exports or to increase the trading of their key commodities which may not be fetching reasonable prices on the international market.

96. Many are the instances where South-South trade is not materializing or is not as good as it might be. Government trading agencies are operating in several countries to control the trade of certain commodities which are vital to the country's economy as well as to watch over the political implications of international trade. In Afghanistan, for example, marketing is a problem regularly hampering its export activities. The Government says that it had to enter the trade sector in order to protect the interests of its exporters, especially in such important products as cotton and leather. In several other countries Governments have entered the trade sector in order to ensure the growers fair prices or to check trade imbalances.

97. Trade in manufactured goods is mostly contingent on entrepreneurial and market interests, while, in a number of countries, it is supplemented by promotional efforts of official agencies. In Brazil, for example, exporting activities are based on institutional machinery intended to provide the local entrepreneur with the means required to place his products effectively in the international market. Marketing activities, in the widest sense of the term, are carried out primarily by the trade promotion sections of the Brazilian diplomatic missions. Countries have been paying greater attention of late to quality control and trade ethics. Several countries have prescribed standards in respect of their manufactures and raw materials which they have also made subject to compulsory grading and classification. To ensure that exporters do not indulge in cut-throat competition by lowering prices and thereby exporting substandard goods, a number of Governments have fixed minimum export prices. Venezuela has been particularly active in the establishment of the Council of Associations of Raw Material Exporting Countries. According to its report, it has encouraged, as a logical consequence of its foreign policy, the adoption of steps designed to protect the prices of raw materials and has worked to consolidate and strengthen existing machinery. It supports the integrated commodity programme, which is designed, *inter alia*, "to improve marketing, distribution and transport systems for commodity exports of developing countries, including an increase in their participation in these activities and their earnings from them"

98. However, where industrialization has been pursued more vigorously, an outward-looking export-oriented policy has been adopted. The Republic of Korea reports that its exports of manufactures increased by 42 per cent in value and 36 per cent in volume each year in the period between 1962 and 1977, well above the import growth rates of 27 per cent in value and 21 per cent in volume over the same period. The share of manufactures in total exports rose from 30 per cent in 1961 to 87 per cent in 1977.

9. Some efforts have been made through multilateral trade negotiations to improve trade with developing countries within the framework of a common

European Economic Community (EEC) policy. EEC countries cite the examples of the Lomé Convention between EEC and 55 ACP countries, the GSP of the EEC for the developing countries, the Association Agreements between EEC and Cyprus, Malta and Turkey and the Co-operation Agreement between EEC and the following countries: Algeria, Egypt, Jordan, Lebanon, Morocco, Syrian Arab Republic and Tunisia. Several developed countries have pointed out that they have no tariff quotas or other limitations on trade with developing countries. They have observed that their volume of trade with developing countries has steadily increased and that it has been beneficial to both North and South.

100. Preferential tariffs introduced by Hungary cover about 600 products and product groups from the developing countries. Furthermore, in Hungary as in several other countries, no duties are levied on imports from the least developed countries. In the past China mainly imported primary products from the third world countries. However, with the industrialization of many developing countries in recent years, it has also started importing manufactured products as well as advanced techniques and technology. China's trade with the developing countries is constantly increasing.

101. The measures Japan took to facilitate imports from developing countries included tariff reductions prior to the Tokyo Round of negotiations, removal of quota controls on certain agricultural products, the liberalization and simplification of the exchange control system, and the establishment of the Manufactured Imports Promotion Organization (MIPRO).¹⁹ Some developed countries—New Zealand for instance—prefer to concentrate on trade co-operation within their region, with countries in their immediate neighbourhood. This approach seems realistic when there are a number of lagging countries in their vicinity and co-operation with them, in pursuance of the Lima Declaration and Plan of Action represents a practical endorsement of its objectives and targets.

102. GATT reports some recent major developments relating to the Tokyo Round of Multinational Trade Negotiations. It mentions eleven major multilateral agreements as having already been reached. Some of them would bring about important changes in the ground rules of international trade, "giving explicit and permanent recognition to the special needs of developing countries". Others would, according to the GATT report, "open substantial new opportunities for the growth of world trade by reducing or regulating various non-tariff measures which distort or block trade". A major result of the Tokyo Round is the provision of a legal basis for the Generalized System of Preferences for preferential trade relations between developing countries, including special treatment for the least developed among them. The GATT report, however, admits that progress in certain areas of the Tokyo Round falls below the expectations of the developing countries.

103. As UNCTAD notes, an evaluation of the results of the Multinational Trade Negotiations, when final, would need to ascertain the extent to

¹⁹ See annex V for summarized information provided by developed countries on institutional measures to expand imports of manufactures from developing countries (column 5).

which the overall and specific objectives of the trade negotiations for developing countries have been achieved and the degree to which this contributes to the attainment of the New International Economic Order. UNCTAD reports that in general for the developing countries the final outcome of the negotiations in the area of tariff and non-tariff concessions would appear meagre, especially in the light of the Lima Declaration and Plan of Action. Many fundamental issues of importance to these countries in connection with the international trading system will remain unsolved.

104. There is need for greater co-ordination among developing countries in the matter of their collective trade interests despite the growing number of producers' associations and groups and the international attempts to rationalize the ground rules. This is all the more necessary in their relationship with the transnational corporations.²⁰ The Lima Declaration and Plan of Action has also highlighted the need for regulating and supervising the activities of the transnational corporations. ILO has reported on the adoption of a tripartite declaration of principles in November 1977 which sets out broad guidelines for integrating transnational companies into national development strategies which are oriented towards employment generation and the satisfaction of basic needs.

ECONOMIC CO-OPERATION BETWEEN DEVELOPING COUNTRIES

105. To repeat: economic co-operation among developing countries is not as intensive as it could be. Several economic anomalies can be observed: for instance, some countries do not trade with their neighbours. On the other hand, some regional schemes can be seen to be instrumental in promoting trade and regional economic co-operation. The Latin American Economic System (SELA), the Caribbean Community, the Andean Group, the Association of South East Asian Nations (ASEAN), the Regional Co-operation for Development (RCD) and the Economic Community of West African States (ECOWAS) are notable examples.

106. The system of economic co-operation promoted under the Cartagena Agreement in Latin America represents another approach to the solution of common economic development problems. Under the Agreement, signatory states are granted special tariff advantages. The Andean Group countries further report that their objectives in the sectoral development programmes of engineering, petrochemical, metalworking and automotive sectors have been pursued by all members. Some countries of the ECLA region have initiated programmes of technical co-operation with several countries in the region, as well as in Africa. This transcontinental co-operation warrants particular attention.

107. In Asia, regional co-operation between the member countries of ASEAN is quite extensive, and includes a variety of co-operation arrangements

²⁰ See, for instance, Constantine Vaitsos, "World industrial development and the transnational corporations: the Lima target as viewed by economic actors", *Industry and Development*, No. 3 (United Nations publication, Sales No. 79.II.B.2).

and projects in trade, investment, payment facilities, industrial development and technology. It is expected that intra-ASEAN trade will increase substantially when preferential trading arrangements, covering more than 700 manufactured items, are fully implemented. ASEAN countries have also agreed to establish large-scale industrial projects in order to accelerate industrial co-operation. Indonesia also reports on some 28 projects of various descriptions which owe their origin to the regional measures of co-operation under ASEAN arrangements.

108. Another example of an institutionalized framework is RCD whose members are Iran, Pakistan and Turkey. The various forms of co-operation include equity ownership in public and private sectors, offtake guarantees for the products of joint enterprises, a common pool of raw materials, adoption of common standards, and the satisfaction of the requirements of the member countries on a complementary basis. Compared with the opportunities that regional co-operation can offer the developing countries and seen in a global context, the activities in this field are insufficient. Many countries have admitted that in their replies. For instance, while pointing out that at ECA consultative meetings, resolutions are passed to work toward harmonizing industrial policies in order to ensure greater industrial complementarity between different countries, Kenya has commented that achievements in these fields are likely to be of a long-term nature requiring hard work.

109. The contribution of the oil-producing Arab countries towards the economic development of the developing countries has been quite substantial. The Arab Common Market has been established, although it is by no means as effective as the European Economic Community. The Arab countries' contribution in terms of financial assistance to the lesser developed countries in Africa and Asia has been quite substantial and steady during the last four years. Iraq estimates it to be 7 per cent of its GNP each year, while Saudi Arabia estimates its support to the least developed countries to be 15 per cent of its annual budget.

110. Many countries in the third world have acquired sophisticated manufacturing capabilities and know-how, which they are in a position to share with other developing countries. Today they are offering turn-key projects and complete plants of various types. They can sell fertilizer factories and blast furnaces, thermal power plants, consumer durables, engineering and consultancy services, and they can even offer financial participation. However, it appears from the reporting countries' own observations that although bilateral, multilateral and regional agreements have been concluded on trade, joint ventures, investments, technological co-operation, training, and the establishment of industrial capacities, they are far short of expectations. The field is wide and its exploitation so far has been limited. New channels, new modalities and catalytic instruments have to be devised.

III. Summary and Conclusions

111. Having abided by the covenant to act as a mirror of official views of individual Governments on the "action-demanding" precepts of the Lima Declaration and Plan of Action, the Secretariat might, at this stage, venture to conclude by giving a brief appreciation of the aggregate country situation prevailing in individual States.

112. It is obvious that industrial patterns and progress in the developing countries constitute a wide and varied scenario. Developing countries span a large spectrum in terms of their stages of industrial development. At the same time industrial growth can only take place in close interplay with existing social and cultural conditions as well as with other sectors of the economy. Even so, the information furnished by 97 countries indisputably presents a picture of concerns that are common, but vary in intensity.

113. The unavailability of adequate investable resources to sustain the desired tempo of industrial activity would appear to be a major constraining factor. In general, the developing countries' capacity to finance the import of capital goods for industrialization has been decreasing. The problem is aggravated by worsening terms of trade and debt servicing; the mobilization of both external and local financial resources is proving increasingly difficult. A major contributory factor is the underutilization of industrial capacities, which limits the possibilities of self-finance in industry.

114. Resource limitations are also hampering the development of infrastructural facilities, in particular in the least developed countries. That has major implications for the regional dispersal of industry and integration of the industrial and agricultural sectors. It may be noted that increasing emphasis is being placed in many developing countries on the integration of primary and secondary sectors and on the geographical dispersal of industry.

115. A parallel element in the industrialization strategy of the developing countries is the full utilization of their natural and human resources. Greater emphasis should be placed on increasing the levels of local processing of raw materials. Such an approach would require adjustment on the part of developed countries and transnational corporations.

116. Upgrading of skills in the developing countries is a primary requisite for the fulfilment of most countries' industrialization plans. A number of

schemes are in operation and others are being planned at the national and regional levels. Equally important is the development of entrepreneurial and management skills, particularly in the context of small-scale industry.

117. Because of the inevitable uncertainties over the long term, it is necessary to ensure that, while maintaining the general direction of development, planning mechanisms have sufficient flexibility to respond to emerging policy and plans. In the field of technology, current awareness needs to be translated into action to establish the necessary range of capabilities at the national level. In this connection, the contribution of the developed countries and the transnational corporations should be substantially increased.

118. The perceptions of the developing and developed countries in the matter of industrial redeployment are not necessarily similar, and a basis of common interest needs to be realized.

119. The foregoing conclusions are general. Detailed statistical data have been collected and examined in the special issue of the *Industrial Development Survey*,²¹ in which a rigorous analysis of the data conducted at both country and sectoral levels in general confirms the above observations. As is to be expected, the attainment of the target set in the Lima Declaration and Plan of Action calls for intense and sustained efforts on the part of the developing countries, as well as of the international community as a whole. The attainment of sustained growth rates and the dynamism of industrialization are likely to present some problems that may call for major structural changes internationally as well as for shifts in the economies and societies of individual countries. That underscores the need to maintain a close monitoring of the progress and problems of the developing countries and to conduct periodic reviews of the actions taken by Governments and the international community to identify possible actions that could be taken by UNIDO to provide timely assistance.

120. For future monitoring, it might be worth considering the elaboration of a set of indicators to show trends and the extent of progress towards the implementation of the Lima Declaration and Plan of Action. The indicators might be applied to such areas as: growth rates, share of the manufacturing sector in GDP, attainment of social objectives, and creation of technological capabilities.

²¹ *World Industry since 1960 . . .*, chapter IX.

IV. Action Requested of the Conference

121. In its resolution 45 (IX) of 30 April 1975 the Industrial Development Board requested the Executive Director of UNIDO to request periodically, from Governments and international organizations concerned, information on the action taken and the progress achieved towards implementing the Lima Declaration and Plan of Action and to submit reports thereupon to the Board. Subsequently, the Board, in its capacity as intergovernmental preparatory committee for the Third General Conference of UNIDO, decided that a report of the progress made by the Governments and international organizations towards the implementation of the Lima Declaration and Plan of Action, should be submitted for consideration by the Conference. This report has been prepared pursuant to that decision.

122. The Conference may wish to take note of the views expressed and conclusions drawn herein which are based on the contributions received from the Governments and international organizations in response to the questionnaires sent to them by UNIDO and consider the matter of future monitoring of the progress towards the implementation of the Lima Declaration and Plan of Action. In this connection, the following are two of the questions to be decided:

- (a) What should the frequency of future exercises be? (The Secretariat suggests three years.)
- (b) Should some general or specific progress indicators (such as growth rates attained, share of the manufacturing sector in GDP, attainment of social objectives, creation of technological capabilities etc.) be included in future questionnaires?

Annex I

Country Participation in Second Monitoring Exercise, 1978-1979

Questionnaires sent on 4 May 1978 to 151 countries (117 developing, 34 developed)
 Number of replies received by deadline 30 Nov. 1978: 10 (10 developing, 0 developed)
 Total number of replies received by 30 June 1979: 97 (72 developing, 25 developed)

	<i>Reply received by:</i>			<i>Reply received by:</i>		
	<i>30 Nov.</i>	<i>31 Mar.</i>	<i>30 June</i>	<i>30 Nov.</i>	<i>31 Mar.</i>	<i>30 June</i>
	78	79	79	78	79	79
Afghanistan		x				x
Albania						
Algeria						x
Angola						x
Argentina						x
Australia						x
Austria		x				
Bahamas						
Bahrain						
Bangladesh			x			
Barbados						
Belgium		x				x
Benin						
Bhutan						x
Bolivia		x				x
Botswana		x				x
Brazil	x					x
Bulgaria		x				x
Burma						
Burundi		x				x
Byelorussian SSR		x				
Canada			x			
Cape Verde						x
Central African Empire		x				x
Chad						x
Chile	x					
China			x			
Colombia		x				
Comoros						x
Congo						
Costa Rica						
Cuba			x			x
Cyprus	x					
Czechoslovakia		x				x
Democratic Kampuchea						
Democratic Yemen						
Denmark		x				x
Djibouti						x
Dominican Republic						x
Ecuador		x				x
Egypt						x
El Salvador		x				x
Equatorial Guinea						x
Ethiopia			x			x
Fiji	x					
Finland		x				
France						
Gabon						
Gambia						x
German Democratic Rep.						x
Germany, Fed. Rep. of						x
Ghana						x
Greece						
Grenada						
Guatemala					x	
Guinea						
Guinea-Bissau						
Guyana					x	
Haiti						
Honduras					x	
Hungary					x	
Iceland					x	
India					x	
Indonesia					x	
Iran						
Iraq					x	
Ireland						
Israel						
Italy						x
Ivory Coast						x
Jamaica						x
Japan					x	
Jordan				x		
Kenya					x	
Kuwait						x
Lao People's Dem. Rep.						
Lebanon						
Lesotho					x	
Liberia						
Libyan Arab Jamahiriya						x
Liechtenstein						
Luxembourg						
Madagascar						x
Malawi						x
Malaysia						x
Maldives						x
Mali						x
Malta						x
Mauritania						x
Mauritius						x
Mexico				x		
Monaco						

Annex I (continued)

	Reply received by:				Reply received by:		
	30 Nov. 78	31 Mar. 79	30 June 79		30 Nov. 78	31 Mar. 79	30 June 79
Mongolia			x	Spain			x
Morocco	x			Sri Lanka		x	
Mozambique				Sudan		x	
Nepal				Suriname			
Netherlands		x		Swaziland		x	
New Zealand		x		Sweden		x	
Nicaragua				Switzerland		x	
Niger		x		Syrian Arab Republic		x	
Nigeria		x		Thailand		x	
Norway		x		Togo		x	
Oman		x		Trinidad and Tobago			
Pakistan		x		Tunisia			x
Panama		x		Turkey			x
Papua New Guinea		x		Uganda			
Paraguay	x			Ukrainian SSR		x	
Peru			x	USSR			
Philippines				United Arab Emirates		x	
Poland				United Kingdom			x
Portugal				United Rep. of Cameroon	x		
Qatar				United Rep. of Tanzania		x	
Republic of Korea		x		United States		x	
Romania		x		Upper Volta			
Rwanda	x			Uruguay		x	
Sao Tome and Principe				Venezuela			x
Saudi Arabia		x		Viet Nam			x
Senegal				Yemen			
Seychelles				Yugoslavia		x	
Sierra Leone		x		Zaire		x	
Singapore		x		Zambia			
Somalia		x					

Annex II

Industrial Growth Targets and Major Groups of Manufacturing Industries Included in Current Development Plans of Responding Developing Countries

Responding country	Current plan period	Annual growth target for industrial sector (percentage)	Major groups of manufacturing industries included in Plan																	
			Manufacture of food, beverages and tobacco (ISIC 31)	Textile, wearing apparel, and leather industries (ISIC 32)	Manufacture of wood and wood products, including furniture (ISIC 33)	Manufacture of paper and paper products, printing and publishing (ISIC 34)	Manufacture of chemicals and chemical products (ISIC 35)	Manufacture of non-metallic mineral products, except petroleum and coal (ISIC 36)	Manufacture of metal products, machinery and equipment (ISIC 37)	Manufacture of fabricated metal products, machinery and equipment (ISIC 38)	Other manufacturing industries (ISIC 39)									
Afghanistan	1979-1984		x	x			x													
Bangladesh	1979-1983	7.3						x												
Bolivia	1976-1980	9.8						x												
Botswana	1976-1981	13.2																		
Brazil	1975-1979																			
Burundi	1978-1982	14.7																		
Central African Empire	5 years		x																	
Chile	6 years																			
Colombia	1979-1982																			
Columbia	1976-1980																			
Cuba	1981-1985																			
Cyprus	1979-1981	11.0	x	x																
Ecuador	(1978)	12.9	x	x																
El Salvador	1978-1982	9.9																		
Ethiopia																				
Fiji	1976-1980	7.8																		
Gambia	1975-1980	4.5																		
Ghana	1975-1980	7.5																		
Guatemala	1975-1979-1982	10.8	x	x																
Guyana	1978-1981		x																	

Annex II (continued)

Responding country	Current plan period	Annual growth target for industrial sector (percentage)	Major groups of manufacturing industries included in Plan											
			Manufacture of food, beverages and tobacco (ISIC 31)	Textile, wearing apparel, and leather industries (ISIC 32)	Manufacture of wood and wood products, including furniture (ISIC 33)	Manufacture of paper and paper products, printing and publishing (ISIC 34)	Manufacture of chemicals and chemical products (ISIC 35)	Manufacture of non-metallic mineral products, except petroleum and coal (ISIC 36)	Basic metal industries (ISIC 37)	Manufacture of fabricated metal products, machinery and equipment (ISIC 38)	Other manufacturing industries (ISIC 39)			
Honduras	1979-1983	10.9				X	X	X	X	X	X	X	X	X
India	1978-1983	7.0	X	X		X	X	X	X	X	X	X	X	X
Indonesia	1979-1984	11.0	X	X		X	X	X	X	X	X	X	X	X
Iraq	1976-1980	17.8	X	X		X	X	X	X	X	X	X	X	X
Ivory Coast	1976-1980	13.0	X	X	X	X	X	X	X	X	X	X	X	X
Jamaica	1976-1980	26.2	X					X						
Jordan	1979-1983	9.0												
Kenya	1976-1981	15.0												
Kuwait	1976-1980		X	X										
Lesotho	1976-1980	20.8	X					X						
Libyan Arab Jamahiriya	1976-1980													
Madagascar														
Malawi	1976-1980	12.0	X	X				X	X	X	X	X	X	X
Malaysia														
Maldives														
Mali	1974-1978		X	X										
Malta	1973-1980													
Mauritania	1976-1980		X	X										
Mauritius	1975-1980		X	X										
Mexico														
Mongolia	1976-1980	10.5	X	X	X			X	X	X	X	X	X	X
Morocco	1978-1980		X	X				X	X	X	X	X	X	X
Morocco	1976-1978		X	X				X	X	X	X	X	X	X
Niger	1975-1980	28.2	X	X				X	X	X	X	X	X	X
Nigeria														

Annex III
Comparison of Growth of GNP with Change in ODA of DAC
Countries, 1960–1977
(Percentage)

<i>Country</i>	<i>Average annual growth rate of real GNP</i>	<i>Overall change in ODA/GNP ratio</i>
Japan	8.9	-0.03
France	5.0	-0.75
Norway	4.8	+0.71
Canada	4.8	+0.32
Netherlands	4.7	+0.54
Austria	4.6	+0.24
Finland	4.5	+0.10 ^a
Italy	4.4	-0.12
Australia	4.3	+0.08
Belgium	4.3	-0.42
Germany	4.2	-0.04
Denmark	3.8	+0.51
Sweden	3.6	+0.94
United States	3.3	-0.31
New Zealand	3.2	+0.18 ^b
Switzerland	3.2	+0.15
United Kingdom	2.0	-0.18
Overall	4.2	-0.20

Source: Data taken from *Development Co-operation, 1978 Review* (Paris, OECD, 1978), p. 133.

Note: The correlation coefficient between the two sets of variables is not significant (-0.04).

^a Since 1970.

^b Since 1966.

Annex IV

Net Official Development Assistance from DAC Countries to Developing Countries and Multilateral Agencies

Country	1966-1968 average		1970		1974		1975		1976		1977	
	(mil- lions of dollars)	(Per- cent- age of GNP)	(mil- lions of dollars)	(Per- cent- age of GNP)	(mil- lions of dollars)	(Per- cent- age of GNP)	(mil- lions of dollars)	(Per- cent- age of GNP)	(mil- lions of dollars)	(Per- cent- age of GNP)	(mil- lions of dollars)	(Per- cent- age of GNP)
Australia	148	0.57	202	0.59	430	0.55	507	0.60	385	0.42	427	0.45
Austria	15	0.13	11	0.07	59	0.18	64	0.17	48	0.12	118	0.24
Belgium	84	0.43	120	0.46	271	0.51	378	0.59	340	0.51	371	0.46
Canada	187	0.30	346	0.42	713	0.43	330	0.55	886	0.46	991	0.51
Denmark	25	0.21	59	0.38	168	0.55	205	0.58	214	0.56	258	0.60
Finland	(4)	(0.05)	7	0.07	38	0.17	48	0.18	51	0.18	49	0.17
France	808	0.69	971	0.66	1 616	0.59	2 093	0.62	2 146	0.62	2 267	0.60
Germany	495	0.39	599	0.32	1 433	0.37	1 689	0.40	1 384	0.31	1 386	0.27
Italy	126	0.18	147	0.16	216	0.14	182	0.11	226	0.13	186	0.10
Japan	342	0.28	458	0.23	1 126	0.25	1 148	0.23	1 105	0.20	1 424	0.21
Netherlands	110	0.43	196	0.61	436	0.63	604	0.75	720	0.82	900	0.85
New Zealand	10	0.22	14	0.23	39	0.31	66	0.52	53	0.41	53	0.39
Norway	18	0.22	37	0.32	131	0.57	184	0.66	218	0.70	295	0.82
Sweden	63	0.26	117	0.58	402	0.72	566	0.82	608	0.82	779	0.99
Switzerland	17	0.10	30	0.15	68	0.14	104	0.19	112	0.19	119	0.19
United Kingdom	462	0.43	447	0.36	717	0.37	863	0.37	835	0.38	914	0.37
United States	3 352	0.41	3 046	0.31	3 437	0.24	4 007	0.26	4 334	0.25	4 159	0.22
Overall	6 266	0.40	6 807	0.34	11 302	0.33	13 587	0.35	13 665	0.33	14 696	0.31

Source: Data taken from *Development Co-operation, 1978 Review* (Paris, OECD, 1978), p. 191.

Annex V
Summary of Information Provided by Developed Countries on Selected International Industrial Co-operation Issues

Country	<i>Special measures taken to encourage investments in developing countries</i> (1)	<i>Policies relating to structural adjustments in industry, redeployment</i> (2)	<i>Research programmes oriented towards developing appropriate technologies of direct benefit to the developing countries</i> (3)	<i>Facilities to provide flow of pertinent technological information to the developing countries. Establishment of the Industrial and Technological Information Bank (INTIB)</i> (4)	<i>Institutional measures taken to expand and diversify imports of manufactured products from developing countries</i> (5)
Austria	<p>Special soft loan facility for Austrian enterprises wishing to invest in production units in developing countries:</p>	<p>Facilitated by the country's liberal commercial policy as well as additional policy measures, changing international comparative advantages have allowed developing countries to obtain important shares in Austrian market of manufactures. Consequently, considerable segments of Austrian industry have moved to other lines of production or transferred capacities to developing countries</p> <p>Long-term study undertaken by a Vienna institute on the competitiveness of selected branches of Austrian industry in the context of an international division of labour. Another study also car-</p>	<p>Efforts are undertaken by research institutes and individual firms to develop technologies geared to the specific needs of the developing countries</p>	<p>Under agreement with WIPO the International Patent Documentation Centre has been set up in Vienna</p> <p>Austria supports the concept of INTIB and its transformation from a UNIDO pilot programme to a permanent activity</p>	

ried out approaching the subject from the vantage point of developing countries

Belgium

Belgian Investment Corporation (SBI) established 1971; 51% public sector capital. About half of its investments hitherto have been in developing countries

System for guaranteeing direct Belgian foreign investments abroad against political risks established 1971

Double taxation agreements with 14 developing countries; investment protection agreements with 8 developing countries

Belgium's industrial policy is liberal and it is not possible for direct measures to be adopted for the transfer of industrial capacities to developing countries

A UNIDO office has been set up in Brussels in 1976 for the promotion of investment and the transfer of industrial technologies

Bulgaria

Assists in the establishment of industrial capacities in developing countries; in most cases paid for through the projects' production

Long-term trade agreements and agreements for economic and technological co-operation with various developing countries including agreements covering two or three five-year periods where possible and appropriate have been concluded

Canada

Industrial co-operation programme, established 1970, provides support for feasibility and pre-feasibility study activities by Canadian firms to establish or expand operations in developing countries. In Sept. 1978 the programme was enlarged to cover assistance in project identification and support and in improving Canadian private sector understanding of and ability to relate to industrial co-operation opportunities

In order to facilitate the transition to a less protective trading environment in the 1980s several policies are being pursued to assist in the structural adjustment of industry

The Canadian International Development Research Centre (IDRC) was established in 1970 to promote scientific and technological research relevant to the third world

IDRC supports, *inter alia*, developing country participation in existing world-wide information systems, as well as the development of regional systems

One main thrust is to support with information the establishment of industrial extension services particularly tuned to the needs of small and medium-sized industries, for example through TECHNUNET-Asia which involves eleven institutions in nine developing countries

A Trade Facilitation Office has recently been established with the objective of assisting developing countries to export to the Canadian market

Czechoslovakia

Has assisted in establishment of about 60 industrial units in developing countries within framework of long-term credits. In many cases Czechoslovakia imports some of the products manufactured by their industrial units

Trade agreements have been concluded with practically all developing countries as well as many agreements on economic, industrial, scientific and technical co-operation

Denmark

Established in 1967, the Danish Industrialization Fund for Developing Countries (IFU) provides loans to joint ventures in

The Danish Industrialization Fund for Developing Countries (IFU) has financed a report on the possible use of Danish

Considerable interest has been given, primarily through IFU, to the development of INTIB

Structural adjustments in Danish industry is consequential to policies and measures of non-discriminatory nature and

developing countries
IFU has collected material from about 150 Danish enterprises interested in a partnership in joint ventures with developing countries

growing market access for developing country manufactures

technology in the developing countries

Finland

Because of the relatively high unemployment problems, the Finnish Central Bank has taken a restrictive attitude towards clearing applications for investments abroad which would involve transfer of productive capacity from Finland

A survey is being undertaken on the adaptation of Finnish industry to changes in the international economic structure. At present no coordinated policies related to structural adjustment have been applied at the national level

France

The Seventh French Plan (1976-1980) includes for the first time a priority action programme specifically relating to scientific and technical cooperation with develop-

Under a liberal economic system, the economic agents themselves, rather than public authorities, are responsible for the enterprises adapting to the situation on the

ing countries. ORSTOM (Overseas Office for Scientific and Technical Research) is devoted exclusively to co-operation with developing countries

domestic and international markets. The public authorities have, however, some means of action within the framework of national industrial policies which involve several objectives, including the development of production capacities in developing countries

Industrial redeployment must not be interpreted as meaning abandonment of whole industrial sectors in the French economy; specialization within such sectors should be sought

Has assisted in the establishment of over 600 factories, complete industrial plants and other installations in developing countries since 1955

German Democratic Republic

Main instruments to promote investments in developing countries are: (a) ERP (Export Risk Protection) credits for the

Germany, Federal Republic of

Most of the transfer of technology to developing countries is done in complexes such as complete plant or integrated machine systems for new production facilities. The appropriate technologies are developed in that context

The Centre for Information and Documentation on External Economic Relations (ZIDA) handles the country's co-operation within the framework of the pilot operations of INTIB

Arrangements since 1976 between concerned Federal Ministries to orientate the Government R and D potential towards

A special information service is being set up at Federal level so as to make scientific and technological information

establishment or expansion of enterprises in developing countries
(b) Federal system of guarantees against political risks for private direct investments abroad, established 1960
(c) Participation of the German Development Company in direct investments in a developing country
(d) Investment protection and promotion agreements with over 40 developing countries

private entrepreneur and Government activities are primarily designed to provide better information on general economic data to assist entrepreneurs to decide what adjustment measures they should take. To this end, regular structural reports on the industry sector basis are made
Government support for home industry investment in developing countries represents an instrument of structure policy

meeting requirements of developing countries, in particular those of their poorest sections of their population

available to developing countries
INTIB has been supported by the Federal Republic of Germany. Results of the pilot phase are awaited with interest

Hungary

Hungary does not support the concept of foreign investment. It operates in long-term production agreements with developing countries

As the country's industrialization developed only in recent decades, Hungarian methods often require only minimal adaptation, without any special research, to meet the needs of the developing countries

The supply of industrial equipment to the developing countries is always connected with simultaneous supply of information and knowledge. The flow of information is designed to be promoted, *inter alia*, by two agreements with UNIDO in the instrument and electronics industry and the aluminium industry. Hungarian specialists have cooperated in the formulation of the concept of INTIB

Hungarian trade organs render certain assistance, e.g. special promotion activities (organized jointly with UNIDO) in connection with the Budapest International Fair

Structural adjustment in industry is a continuous process. However, on basis of 1977 resolution of the Central Committee guiding principles governing long-term external economic policies and the development of production structure have been established. They are in line with endeavours to promote an increasing participation of the developing countries in world industrial production

Italy

Italy has not undertaken any specific programming measures to encourage investments in the developing countries

A law was recently approved on restructuring and reconversion of industry using public funds. In applying this law, account is taken of conditions affecting domestic industry, industry in developing countries and in more advanced countries with a view, *inter alia*, to achieving a redeployment of Italian industry which would be favourable to the developing countries

Italy favours establishment of INTIB subject to the necessary co-ordination between such an institution and action taken by governments at the national level

Italy has not yet promoted such programmes. However, Italy has intermediate technologies appropriate to the developing countries, especially as regards the agro-industrial sector

Japan

The Government supplements overseas commercial financing activity through the overseas investment financing systems of Export-Import Board of Japan, and the Overseas Economic Cooperation Fund (OECF). It provides funds through the Overseas Trade Development Association to, *inter alia*, assist financing joint ventures between Japanese small and medium enterprises and developing countries. An overseas investment insurance has been established

The Japanese Chamber of Commerce and Industry, the Japan Patent Information Center (JAPATIC) and Japan External Trade Organization (JETRO) provide technological information to developing countries

The Japanese Government sponsors a number of research co-operation programmes in developing countries within the framework of technical co-operation

Structural adjustments in industry are promoted gradually through voluntary efforts by private enterprises. By providing unemployment relief measures and by giving incentives, the Government promotes changes in industry

Netherlands

The Government has recently strengthened the financial base of the Netherlands Finance Company for Developing Countries. It has instituted re-insurance scheme for investments against political risks and entered into economic co-operation agreements with 19 developing countries

The Government has adopted Memorandum on Selective Growth as basis for policy-making. Financial assistance is provided to industrial enterprises whose activities are no longer viable in the Netherlands but which have a comparative advantage in developing countries

In order to stimulate co-operation in development-oriented research with developing countries, an Advisory Council for Scientific Research on Development Problems (RAWOO) was set up in 1977. For the identification of areas for research on basis of existing problems the Netherlands Foundation for Technological Development for Developing Countries (TOOL) acts as an intermediary between developing countries and Netherlands universities

The Netherlands Centre for Promotion of Imports from Developing Countries (CBI) provides, *inter alia*, support for subcontracting arrangements with industries in developing countries

The Netherlands supports strengthening UNIDO as a central co-ordinating body for industrial technology. INTIB should be developed through a decentralized approach whereby it should collect the sources of specific information

New

Zealand

New Zealand has a small input to TECHNUNET, the computer-based industrial information service in Singapore serving nine surrounding countries

In 1976 the Pacific Islands Industrial Development Scheme (PIIDS) was introduced to assist in the establishment of joint ventures

Norway

Bilateral agreements have been concluded with several developing countries on the protection of private investment. A special investment guarantee system has been established for investments in developing countries

At present the restructuring of industry in Norway is taking place at very high speed, and comprehensive measures are being contemplated (which would be broader than specific programmes of adjustment to imports

In 1977 the Government established the Norwegian Import Promotion Office for Products from Developing Countries (NORIMPOD) to act as an intermediary in establishing business contacts between exporters and

At present Norway has no research programmes specifically oriented towards developing appropriate technologies, but research considered to be of relevance to developing countries is carried out under different

under the Guarantee Institute. The potential investor must obtain prior approval of NORAD, the Government aid agency. NORAD may participate in the financing of pre-investment and feasibility studies undertaken by private firms to develop industrial projects with parties in developing countries

from developing countries)

bilateral agreements

producers in developing countries and the Norwegian market

Spain

A possible system of cooperative research has been examined on occasion of meeting between Spain and Latin American countries on science and technology sponsored by the Ibero-American Co-operation Centre

As a means of promoting the transfer of appropriate technology, catalogues are prepared with direct information on technologies which Spanish enterprises in a particular sector can supply

Sweden

In order to promote the establishment of companies in developing countries in collaboration with Swedish firms the Government set up the Fund for Industrial Co-operation with Developing Countries in 1978

Structural adjustment in Swedish industry is an ongoing process and measures are designed to comply with an open trading system and relevant international obligations. The Government is ready to meet increased international competition with an active restructuring-

No system exists at present to provide a flow of pertinent technological information to the developing countries. However, the recently established SAREC will, *inter alia*, assist in providing a better flow between Sweden and the developing countries of information

Assistance for access to the Swedish Market is provided by the Import Promotion Office for Products from Developing Countries (IMPOCD), established in 1975. Special efforts are made to facilitate imports of products contributing to the industrialization of the

ing policy

on technologies research (as well as on research in general) exporting country

Switzerland

Since 1970 the Swiss authorities have provided investment guarantee against non-commercial risks. The integration of Swiss investment project in the development plan of the host country is one of the conditions for granting the investment guarantee. Bilateral agreements have been concluded with 33 developing countries aimed at the protection and promotion of direct Swiss investment. In co-operation with UNIDO an office for the promotion of industrial co-operation with developing countries was established in Zurich 1978

The structural adaptation of Swiss industry has been accelerated by the recent currency movements, in particular the sharp appreciation of the Swiss franc. Sectors of the industry (such as textile) have switched from labour-intensive to capital-intensive production

An association, Swiss Contact Office for Adapted Technology (SKAT) aiming at promoting the development of adapted technologies has been recently set up. SKAT organizes an information network comprising all the Swiss institutions that have special knowledge in the various fields of simple and adapted technologies

United Kingdom of Great Britain and Northern Ireland

Measures include bilateral investment protection agreements, double taxation agreements, an investment insurance scheme, and a pre-investment study scheme to support the investigation

The Intermediate Technology Development Group (ITDG) is specifically involved in this field, for which it has increased Government support. For example, a section within ITDG called

Institutions such as ITDG and TPI are actively involved in encouraging the flow of information about technology. The United Kingdom has supported UNIDO work on INTIB

of opportunities to which the developing country Government attaches priority and which might not otherwise have been considered by United Kingdom firms for equity/loan or management participation

Intermediate Technology Industrial Services has recently been set up in line with ITDG growing involvement in the industrial sector. Other institutes engaged in research aimed at developing technologies assisting developing countries include the Tropical Products Institute (TPI)

United States of America

The Government has undertaken a commitment to carry out adjustment assistance on *ad hoc* basis. It must rely primarily on open-market forces to accomplish the structural adjustments in industry

A technical network among developing countries has been established by the National Technical Information Service (NTIS) which is the central source for the public sale of United States Government-sponsored R and D. Co-operating agencies are currently located in some 13 developing countries

Appropriate Technology International (ATI) was launched in 1977 with the aim of providing grants to entities in the private sector of developing countries for the purpose of assisting in the testing and dissemination of appropriate technologies

Source: Government replies to questionnaire.

Note: Blank spaces indicate that no specific information was given.

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