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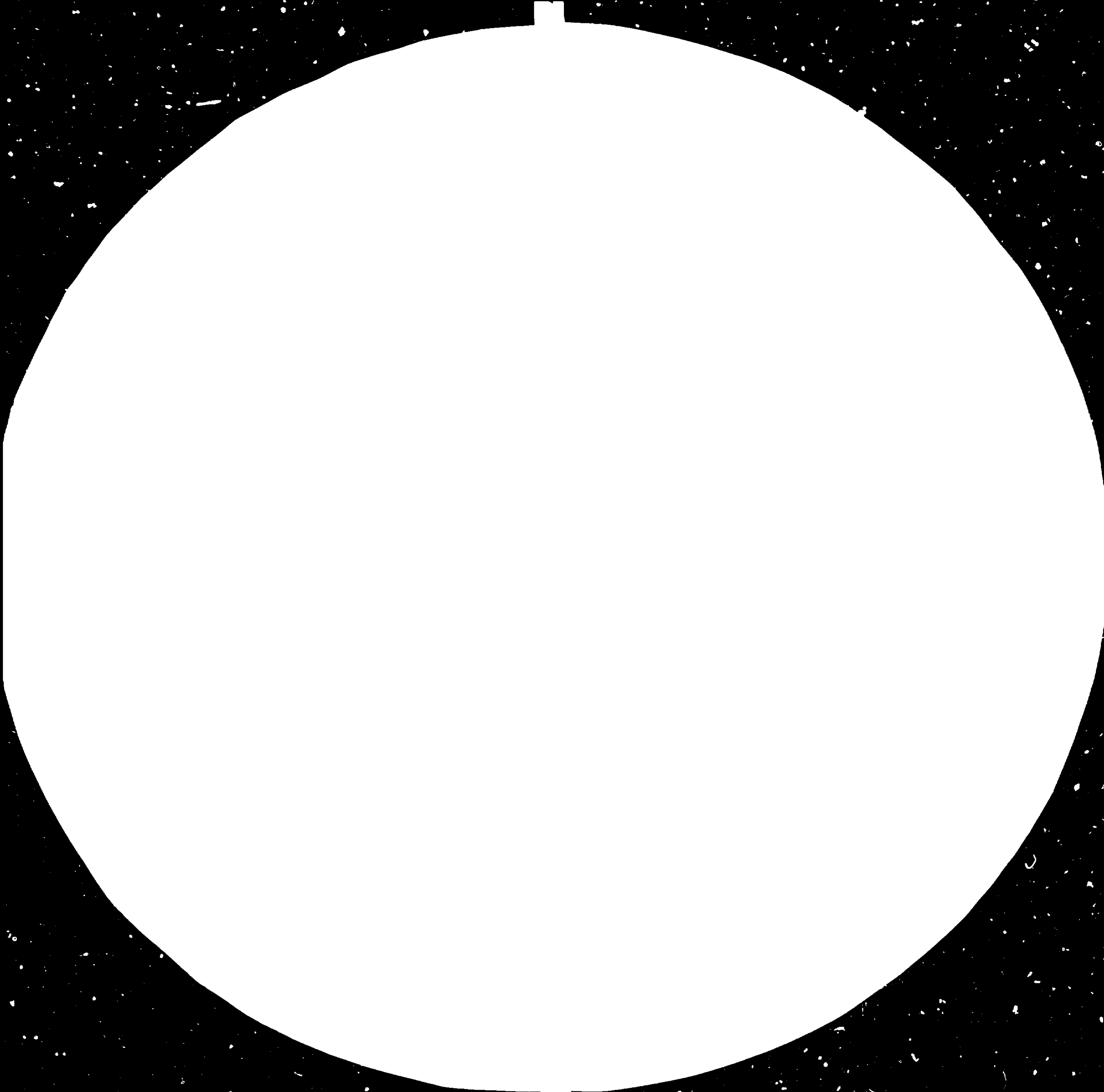

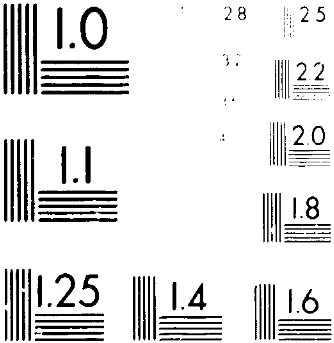

MICROCOPY RESOLUTION TEST CHART

Item 4 of the provisional agenda

LIMA AND NEW DELHI DECLARATIONS AND PLANS OF ACTION:
RETROSPECTIVE AND PERSPECTIVE:

(a) REVIEW OF PROGRESS AND CONSTRAINTS;
(b) PERSPECTIVES FOR THE ACHIEVEMENT OF THE LIMA TARGET

Background paper prepared by the UNIDO secretariat

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CONTENTS

INTRODUCTION

1. In the 10 years from 1963 to 1973, the developing countries increased their manufacturing output at an average rate of 8.0 per cent per annum. Even in the more difficult period from 1973 to 1980 they managed to achieve an average growth of 5.8 per cent. These figures represent a considerable achievement and a shift in the structures of the economies of the developing countries as well as progress in world trade, the acquisition of skills, increasing productive capacity, technology and institutional infrastructure.

2. This achievement and the hopes it has raised are now in jeopardy. The world economic crisis of recent years has put a halt to the steady progress of previous years. It has brought many developing countries to the brink of disaster. Perilous financial positions, food and energy shortages and a fall for three successive years in real per capita incomes are widespread.

3. The crisis has revealed the interdependence of the world economy. Both North and South have lost. But it is an unequal interdependence: the developing countries have lost most. Their vulnerability has been confirmed and accentuated.

4. In such conditions, the temptation is to postpone consideration of industrialization in the developing countries. But industry maintains a key role in development and is the essential linkage of an efficient and integrated economy, a means for greater self-determination, a source of material benefits and a dynamic instrument of growth. Action at the international level is needed urgently if the progress so far made is not to be lost and if further progress is to be steadily maintained.

5. The agenda for the Fourth General Conference of UNIDO includes all the central issues of industrialization. In preparation for the Conference, a series of high-level expert group meetings were held, covering the important subjects of technology, human resources, industrial strategies and policies, economic co-operation among developing countries and energy. The findings of these meetings, together with other studies, are reflected in the issue papers and background papers prepared for each of the succeeding agenda items of the Conference. It is hoped that a detailed examination can therefore be made by the Conference of the critical areas of human resources, technology, finance, energy, restructuring and redeployment, raw materials processing, rural development, the least developed countries and South-South co-operation. The fulfilment of the goals of the Industrial Development Decade for Africa will also be especially considered.

6. The present paper, however, is intended to analyse the critical point now reached by the developing countries in their industrialization and ways and means of renewed progress. The present economic crisis has revealed the way in which the existing structures inhibit the industrialization of the South. The need is for changed structures, reducing the asymmetry of existing relations and countering the present vulnerability of many developing countries.

7. In changing existing structures, the importance of technology is crucial. As the Committee for Development Planning has noted, "control of technology is the cornerstone of the international power structure at the present time. Technology shapes the international distribution of income." 1/ Only through technological change and industrialization can the developing countries reduce their dependence, preserve and enhance their competitiveness in the world economy and achieve self-sustaining growth.

8. The analysis contained here thus attempts to go beyond the mere reporting of the unsatisfactory record of recent years, by examining the causes of lack of progress, rooted in the structure of international economic relations and of the developing countries' economies, and putting forward the view that industrialization of the developing countries and a revival of the world economy depend upon one another. Co-operation, both North-South and South-South, to change the existing structures and allow such progress must be a central objective of the world community.

I. PROGRESS IN INDUSTRIALIZATION

A. Overview

9. The latest analysis shows that in 1975 the share of developing countries in world manufacturing value added (MVA) was 10 per cent.* The estimate for 1982 is 11 per cent, implying that in the seven years since the target was adopted the share of developing countries in world MVA had increased by only one percentage point. An examination of figures for the periods 1975 to 1982 shows that the 10 per cent share did not increase at all between 1975 and 1977, but remained constant. In 1978 it increased slightly to 10.3 per cent and in 1979 to 10.5. The 11 per cent share was attained in 1980. Preliminary figures for 1981 show a slight decline to 10.9 per cent, with the 11 per cent share being once again attained in 1982.

10. It is notable that this lack of progress in increasing the share for developing countries has occurred over a period when the growth of manufacturing in the developed market economies was slow. Between 1975 and 1982, the annual average growth of MVA for this group of countries was only 1.9 per cent.

11. The limited changes in the share of world manufacturing illustrate insufficient progress, not only towards the quantitative target of the Lima Declaration and Plan of Action on Industrial Development and Co-operation (A/10112, chap.IV), but more importantly towards the industrial co-operation called for in the Declaration. No real impetus has been given to the industrialization of the developing countries. The spirit of co-operation and collective action in which the world community pledged its help to attain

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* Based on data available at the time of the Second General Conference of UNIDO, the figure was 7 per cent. The 10 per cent estimate was reached after adjusting for 1975 prices (as compared to 1970 prices) and extending the coverage further.

progress for the developing countries and a new international economic order has not been translated into practical action. It was a fundamental feature of the Lima Declaration and Plan of Action on Industrial Development and Co-operation (A/10112, chap.IV) that the new global industrial structure called for in it depended upon concerted and sustained action by all countries: in the seven years since the Declaration was adopted the world has seen, instead, a succession of economic crises and a shelving, if not abandonment, of increased co-operation.

12. Such summary statistics give only an overview of the progress of industrialization in the developing countries since 1975. However, not much more encouragement can be derived from a consideration of the more detailed figures. Of these, one of the most striking is the fact that the share of world MVA of the least developed countries has remained steady over the whole period at the very small figure of 0.2 per cent in all years. This again contrasts sadly with the call in the Lima Declaration for special attention to be given to these countries in the form of technical and financial resources as well as capital goods for their industrial development.

B. Latin America

13. Progress has been particularly disappointing in Latin America where the share of the region in MVA stagnated during the period 1975-1982. Within the framework of the Lima target, a number of regional targets were adopted, and that for Latin America was 13.5 per cent of world MVA. It is true that individual countries in the Latin American region have shown significant progress in industrializaton, but other countries in that region have been less successful. A decline in the share from 1975 to 1978 was followed by an increase: the share in 1980 exceeded the 1975 level, but this was to be followed by a further decline.

C. Africa

14. The African region in 1975 had a share of 0.88 per cent of total world MVA, and by 1982 this had risen to 1.11 per cent. This figure is, in fact, in excess of the 1 per cent target for 1985 embodied in the target set for the Industrial Development Decade for Africa. At first sight, therefore, the subsequent target of 1.4 per cent for 1990 for Africa and the target of 2 per cent for the year 2000 seem less remote, given present trends, than the target for Latin America. However, it should be recalled that the relative nature of the target means that, without a sustained recovery of the world economy, the actual MVA of Africa in absolute terms may yet remain small and may, thus, make only a limited contribution to the overall development of this region.

D. Western Asia

15. The region of western Asia, for which no regional target was adopted, has seen a slight increase in its share of the world total from 0.67 per cent in 1975 to 0.80 per cent in 1982. The increase, nevertheless, is small when

the considerable investment in the manufacturing sector that has taken place in this region is recalled. In spite of a massive diversion of resources, which were derived from oil sales in the region to the manufacturing sector, progress so far has not been considerable and certainly not sufficient to contribute significantly to overall improvement of the developing countries in their share of world industry.

E. South and east Asia

16. Turning to the south and east Asian region, for which the target of 10 per cent for the year 2000 was established, the share of world manufacturing has shown an almost steady rise from 2.7 per cent in 1975 to 3.4 per cent in 1982. The industrial performance of several countries in the region is very significant. It is the growth in the share of this region in world MVA that has principally contributed to the slight overall improvement of developing countries since the Lima target was adopted in 1975. Even here, however, summary statistics mask a more detailed reality, since it is the high growth rates of manufacturing in a subset of the countries in this region that have made the share show an increase, and other developing countries of Asia have not performed nearly as well.

F. The national level

17. The Lima Declaration and Plan of Action on Industrial Development and Co-operation (A/10112, chap.IV), in setting out the 25 per cent target, called for "every endeavour to ensure that the industrial growth so achieved is distributed among the developing countries as evenly as possible". 2/ This objective has not yet been attained. As the special issue of the Industrial Development Survey 3/ points out, in 1980, only 10 developing countries accounted for 70 per cent of the MVA of the developing countries as a whole, and, in fact, a mere five countries (Argentina, Brazil, India, Mexico and the Republic of Korea) accounted for no less than 56 per cent of the total industrial output of the South. Indeed, developing countries classified as being in the lowest income range (those with a per capita income of less than $US 295 in 1978) experienced a steady decline of their share of world MVA throughout the years 1963 to 1980. Low income countries had only 11 per cent of the developing countries' MVA in 1980, even though their combined population was 51 per cent of that of all developing countries.

18. Such figures indicate widespread disparities among the developing countries as to the degree of progress made in industrialization. These arise from natural factors, such as the endowment of mineral resources, the size of the population (and thus the size of the internal market) and the geographical characteristics of the country itself (e.g., its access to the sea). In addition, the domestic policies pursued for development inevitably have cumulative effects. On the one hand, a vigorous policy of export-led industrialization, often reflecting a conscious increase in the technological sophistication of the products exported, will, if pursued for years, lead to the institutionalization of technical and commercial expertise in the economy as a whole. This has, thus, achieved a qualitative transformation but at a high cost, which can include increased vulnerability of the industrialization

process. The group of countries often called the "newly industrializing countries" shares such characteristics, and in 1982, because of their dependence on the external market, the manufacturing growth rate in a number of these countries was much lower than in previous years. On the other hand, countries with large populations, such as China and India, that have adopted industrialization policies more focused on the internal market find themselves less dependent on markets outside the country. These two countries still showed impressive manufacturing growth in 1982 (7.0 per cent and 4.5 per cent, respectively). However, they also have more limited access to foreign exchange. Between these poles is found a large number of developing countries that have followed a mixture of policies, often because the natural features mentioned above have constrained a full export-led strategy or an import-substitution strategy and very often also because the weakness of another key sector - agriculture - or the lack of domestic energy supplies or the low level of income per capita has been a binding constraint on investment resources.

19. At the High-Level Expert Group Meeting on Industrial Policies held prior to the Fourth General Conference, 4/ such perceived differences led to the drawing up of a typology of developing countries. It was recognized that three groups could usefully be distinguished: those with expansion possibilities based on the external market, those with sufficiently large populations to follow a more inward-looking strategy and those who had necessarily to combine both. This last group would include the least developed countries but would not be limited to them. It was on this three-way classification that the Meeting's recommendations were made.

G. The sectoral level

20. The share of manufacturing in the economies of developing countries has been growing steadily. The manufacturing sector raised its proportion of gross domestic product (GDP) from 15.0 per cent in 1963 to 18.1 per cent in 1973 and 19.2 per cent in 1980. These figures, averages for a group of 93 developing countries, show steady progress at the domestic level in structural development. Although the shares tend to be higher for countries with higher income levels, even the lowest income group of countries increased its manufacturing share of GDP from 12.5 per cent in 1963 to 14.4 per cent in 1973 and 15.1 per cent in 1980. In contrast to the overall increase in the manufacturing share, the agriculture's share fell at a steeper rate over the same period: from 28.4 per cent in 1963 to 19.9 per cent in 1973 and 17.4 per cent in 1980. Even for the lowest income group it went from 47.4 per cent in 1963 to 41.8 per cent in 1973 and 38 per cent in 1980. Thus, by structural transformation, the groundwork has been laid for future progress.

21. Figures available for 1980, when the share of developing countries in world MVA was the same as in 1982, namely 11 per cent, show that the shares of developing countries in production at sectoral levels of manufacturing was very uneven. Thus, the developing countries in that year achieved high shares of total world production in traditional industries such as food products (15.1 per cent), beverages (18.6 per cent), tobacco (30.7 per cent) and textiles (18.7 per cent), together with an extremely high share of 41.8 per cent in petroleum refining. They, nevertheless, showed very low shares in technologically more advanced sectors such as metal products (7.3 per cent),

non-electrical machinery (5.0 per cent), electrical machinery (6.6 per cent) and transport equipment (7.5 per cent). These shares have risen scarcely at all since 1975. Given the importance of these sectors in the overall growth of modern economies, both from the point of view of capital goods and the provision of infrastructure for accelerated social and economic development, the implications for sustained growth and self-sufficiency for the developing countries are serious indeed. Moreover, it is the existence and harmonious functioning of such industries, which are at the heart of the industrial complex in modern economies, that plays an enormous role in assuring technological development, efficiency and flexibility for future progress.

II. IMPACT OF THE CURRENT CRISIS ON THE INDUSTRIALIZATION OF THE DEVELOPING COUNTRIES

22. The developing countries had in the past managed to achieve a reasonable growth rate for the manufacturing sector. From 1963 to 1973 it grew at an average of 8.0 per cent per annum. A feature of the present crisis has been not only that the share of developing countries in world MVA has hardly increased since 1975 but also that the high growth rates of manufacturing in developing countries have disappeared: in 1981 manufacturing grew at -0.4 per cent and in 1982 at 0.1 per cent. The slump in the world economy in the early 1970s was something which the developing countries managed to adjust to with remarkable resilience, maintaining acceptable levels of growth in GDP and manufacturing, in spite of the severe difficulties engendered by the slow-down in the North, where, for instance, the GDP of developed countries grew at less than 1.0 per cent in 1975, with a growth of -1.2 per cent in MVA. The present crisis, however, is one that the developing countries have not been able to avoid, and the decline for them has been even more severe than that for the North.

23. An important feature of the current crisis is the decline in world trade. Between 1963 and 1973 it increased at an annual rate of 8.5 per cent, but between 1973 and 1981 the growth was only 3.5 per cent per annum. It did not increase at all in 1981 and actually declined in 1982, by between 1.0 and 2.0 per cent. 5/ The slow growth of the economies of the North has had a severe impact on demand, and this, allied with increasing protectionism, has meant also that exports of manufactures from developing countries have been severely affected. The decline in total export earnings of the developing countries, combined with the severe pressure on their balances of payments by the present crisis, has in turn led many developing countries to reduce their imports. In 1982, for the first time in the last 20 years, real imports of developing countries declined.*

24. The net energy importing developing countries in particular have been compelled to resort to borrowing on commercial terms. This is because no other course was open. The volume of official development assistance grew at 4.0 per cent per annum in real terms in the late 1970s, but it fell 11 per

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* The terms of trade for this group deteriorated by 3 per cent in 1982, the fifth year of decline. World Economic Survey (United Nations publications, Sales No. E.83.II.C.1), p.4.

cent in nominal terms in 1981 and probably did not recover its 1980 level during 1982. 6/ There was a revival in private direct investment in the developing countries in the late 1970s and an increase of 25 per cent in 1981, which has, nevertheless, been at a level altogether inadequate to meet the pressure on the balances of payments of the South. Thus, the main source of funds has been the international capital markets. These seemed attractive so long as interest rates were at a reasonable level, but the very high interest rates prevailing in 1981 and 1982 discouraged further borrowing and raised the cost of servicing external debt to the point where it presented almost impossible difficulties for many countries. The debt service ratio for all developing countries was 13.5 per cent in 1970 and 13.6 per cent in 1980, but by 1981 it had risen to 16.3 per cent and is estimated at 20.7 per cent for 1982. 7/ This total conceals even more alarming figures: the low income countries of Africa had a ratio of 28.3 per cent in 1982 and the oil-importing countries of Latin America had a ratio of 53.2 per cent. Again, migrants' remittances, which had been for selected developing countries an important source of foreign exchange, also stagnated as activity decreased in industrialized countries.*

25. Balance-of-payment pressures have three types of effects on industry in developing countries. In the short term, there is a loss in efficiency of existing investments because import reductions lead to shortages of raw materials and intermediate goods as well as of spare parts and replacement machinery. The result is under-utilization of capacity. In the medium term, the completion of industrial projects already under way is equally affected by import shortages. Finally, new projects, already planned for, must be postponed or cancelled. These difficulties are compounded if the industry, in either its existing or planned capacity, is export-oriented, for then the reduced level of world demand, which is a part of the recession, is a further obstacle to the viability of the industry.

26. In their replies to UNIDO during the third monitoring exercise, Governments of developing countries indicated a recognition of the severe impact of the current economic crisis, in particular the recession in the North, the high level of interest rates, the deteriorating terms of trade for developing countries, foreign exchange constraints and the growth of protectionism. In spite of this, however, Governments of developing countries have not modified their fundamental strategy of relying on the industrial sector for the central contribution to economic growth. But the growing crisis of recent years, as much as the catastrophic performances of 1982, has begun to compel a reassessment of both national and international policies for industrialization.

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* Workers' remittances to developing countries grew at an average of 26.4 per cent per annum in current terms between 1970 and 1980 but only by 7.2 per cent from 1980 to 1982 (World Bank World Development Report 1983), p.15.

27. This also was a finding of a meeting on industrialization strategies and policies for developing countries held at Lima in preparation for the Fourth General Conference of UNIDO:

> "In discussing strategies and policies for industrialization in the developing countries in the 1980s and 1990s, it was agreed that the developing countries] must re-examine existing policies and introduce new ones in correspondence with the new macro-economic realities of the world economy." 8/

28. Whether the recession in developed countries is now ending and has been merely a cyclical one, or whether it is merely a symptom and likely to be a persistent one of a deep-rooted structural malaise in the world economy, it is clear there are lessons to be learned from it. It has exposed the vulnerability of the developing countries in their dependence on the North, for the impact on the South has been far more severe. It has also, therefore, exposed the vulnerability of industrialization strategies that are too closely linked to exports, whether of primary commodities or manufactures, to developed countries. It has focused new attention on the importance of the internal market and given a renewed impetus to economic and technical co-operation among developing countries themselves.

29. The impact of the world recession has been more severe on some branches of manufacturing in developing countries than on others. It has, however, particularly affected some important industries that are at the heart of many developing countries' aspirations for industrialization. These include iron and steel, petrochemicals and engineering industries.

30. For instance, the developing countries had planned to increase their capacity in the iron and steel sector from about 80 million tons in 1980 to almost 200 million tons in 1990, and some countries expected to expand their exports to the developed countries in particular. But by the end of 1983 it seemed that a large part of this increased capacity would not, in fact, be achieved, and projects for building new plants were postponed or cancelled owing to difficulties in obtaining external financing, shortage of raw materials and reduced demand.

31. The petrochemicals industry has also been severely affected. Reduced demand in the developed countries has led to excess capacity in those countries: as a result cheaper imports from the North threatened the viability of new plants in the South. The recession has also led to a reduction in expected demand for the future, and has increased the financing problems for new petrochemical complexes in developing countries. Consequently many planned projects have been postponed.

32. In general, the impact of the world recession can be seen in many branches of manufacturing in the developing countries, although it differs from branch to branch. Thus, it is a shortage of intermediate inputs that affects the leather and leather products industry, as well as the automobile industry in developing countries. But it is a reduced demand in the North that is constraining the South's electronics industry and increased protectionism in the North that is specifically inhibiting the textiles, footwear and clothing industry.

III. INTERDEPENDENCE OF THE WORLD ECONOMY

33. There are recent signs that the prospects for the world economy are brighter than they might have appeared a year ago. However, while a partial recovery in the North is necessary for the progress of the world economy, it is by no means a sufficient condition. There is a need for policies that are co-ordinated internationally and that recognize two key features of the world economy: its interdependence and its changing structure. It is here argued that these features mean that the industrialization of the developing countries is a necessary and beneficial strategy of recovery for the world economy as a whole.

34. The world economy is a linked system. The current economic crisis points to the limitations on the actual powers of national Governments to devise and maintain successful economic policies independent of one another. The most obvious linkage between individual national economies is through trade. A conventional view of world trade would be that the South supplies raw materials (such as agricultural products, minerals and oil) to the North. The North, being industrially advanced, supplies in turn finished goods to the South. Even within this conventional view, a pattern of interdependence can be seen; the industries of the North need the raw materials of the South, and the consumers in the South need from the North those manufactures which they cannot produce themselves. In fact, the situation is a good deal more complicated than this; within the North itself there is an ever-expanding trade between industries. The economies of the North are themselves, owing to specialization, more and more interdependent. Similarly, the South's advances in industrialization, at least in some developing countries, have meant that interdependence is taking new shape and even growing between the developing countries themselves. And even the less sophisticated forms of industrialization, in which developing countries will undertake assembly work and re-export finished goods to the North (in many cases initiated by transnational corporations) show that interdependence is a reality that increases with changes in international trade.

35. In fact, the way in which developing countries have participated in the period of growth in trade following the Second World War shows that they have increasingly become part of the system of global interdependence. The developing countries have increased the share of their exports in GDP during the two decades 1960-1980 from 16 to 25 per cent on average. In 1980, these countries took as much as two-fifths of the exports of the United States, two-fifths of the external exports of the European Economic Community and more than 45 per cent of Japan's exports. The trade of developing countries has thus become more important, not only to themselves but to the world economic system as a whole.

36. The interdependence can be seen clearly by examining the annual growth rates in GDP of developed and developing countries as a whole. It is very noticeable that from 1960, in particular, the growth rates of North and South have shown very similar behaviour, usually rising and falling together but with the impact being in either case greater in the South. The two growth rates clearly move according to some common characteristic. The interdependence between North and South manifests itself as a linked system of growth or, as at present, as a common problem.

37. Another aspect of North-South interdependence is the financial one, and the current debt crisis brings it sharply into focus. By mid-1982, the outstanding total debt of developing countries was about $US 800 billion. Spectacular growth of short-term debts in 1979 and 1980 has meant that the developing countries had to roll over or repay over $US 140 billion, or three times the repayment of their medium-term debts in 1982 alone. Interest payments of $US 60 billion, of which $US 48 billion were on medium-term debts, should be added to this figure, bringing total payments in 1982 of developing countries to service their debts to about $US 244 billion. How can such debts be repaid? Essentially, only high growth and exports by the debtors can enable them to pay back the debt. Other measures, such as rescheduling of debts, can at best postpone the problem. In this sense, the debt crisis cannot be solved by retrenchment. If all the debtor countries contract their economics, the North's exports will shrink, the growth of both South and North will be retarded and this will add to the existing debt problems rather than help to solve them.

38. Interdependence can be used positively to produce a virtuous circle and also negatively to produce a vicious circle - the choice seems clear. Enhancing North-South trade, namely making positive use of increasing interdependence, appears the best option available to both groups. The importance of developing countries in the present structure of global interdependence and, even more significantly, their potential in the future means that renewed efforts for their industrialization can offer significant benefits for the world economy. The developing countries constitute a huge market, largely untapped. The vast majority of the world's population has consumption levels far below those in the North. The economic sectors of the developing countries also represent a largely unexploited field for investment and technological application, and natural and human resources have up to now been used to an insignificant degree. A set of international policies geared towards releasing this tremendous potential would provide opportunities for growth in the world economy beyond any so far known.

39. Potential demand from the developing countries is of such an enormous magnitude that, if supply could be increased, there would be new opportunities for the world economy to attain extremely high levels of growth. The road back to full employment and rapid growth of the world economy can thus be through enlarged investment directed towards releasing the untapped resources of the developing countries for more efficient use in their accelerated industrialization.

40. It is essential that national Governments recognize not only interdependence as it is, and thus co-ordinate their policies in short-term aspects, but also the new frontiers of world economic growth, and thus include policies of structural adjustment specifically directed towards them. Lack of structural adjustment policies mean that the world is worse off than it could be. Rigidities of structure also tend to defeat national macro-economic policy. When there are rigid structures within economies, physical factor mobility is low. This means that existing industrial capacity is kept beyond the point at which it is efficient and labour forces cannot move to more productive sectors. In such a situation, a reflationary policy, using fiscal and monetary measures, is bound to produce inflationary pressures, brought about by the action of special group interests within an economy. Structural rigidity is a basic source of slow-downs in productivity and low efficiency. Macro-economic policy tools can, in such a situation, have little impact, and without productivity growth, anti-inflationary monetary policies will tend to be ineffective and in fact create unemployment and stagnation.

41. Rather, a restructuring policy, which recognizes the growth potential of developing countries and its result and benefits, is needed. There are many indications to upport the view that during the rest of this century the developing countries may offer a new field for industrial growth. Following on earlier waves of industrialization that began in the last century, a group of developing countries began a process of industrialization in the 1950s that has already led them to become major producers.

42. The export of manufactures is one of the most visible indicators of the growth capacity of an economy. The number of developing countries exporting more than $US 100 million worth of manufactured products (at 1975 prices) had increased from 18 in 1965 to 22 in 1970 and to 47 in 1979. The early starters of export-oriented growth are now beginning to shift their export composition to the areas of more sophisticated technology and to skill-intensive products. The latecomers benefit from the lessons learned by early starters by beginning with manufactured goods requiring low levels of skills. Learning by doing enables the newcomers to compete in the international market effectively, as proven by the rates of market penetration and export growth. The rapid development and application of transportation, communication and information technology during the period following the Second World War appear to have hastened the spread of industrialization.

43. Savings and investment rates provide another indicator of the industrial growth potential of a country. The record shows that the number of developing countries saving 20 per cent or more of GDP had increased from 17 to 31 between 1960 and 1979, and the number of developing countries investing 20 per cent or more of GDP had increased from 20 to 56 during the same period. Such saving and investment activities were already bringing fruit in the form of industrial growth. During the 1970s, 52 developing countries had exceeded the average rate of industrial growth recorded in industrial economies (3.2 per cent). This compares with the record of the 1960s when 29 developing countries exceeded the average growth of industrialized economies (6.2 per cent).

44. Skills (production, managerial and even entrepreneurial) and the ability to absorb know-how and technology are also essential inputs for industrialization. Developing countries have already made significant progress in this field. The number of students enrolled at universities, colleges and institutions of higher learning in developing countries was less than 1 million in 1950. This figure has now risen to about 10 million, which is equal to the enrolment at the university level in all developed countries, including the Union of Soviet Socialist Republics and the United States of America, in 1960. These changes in production inputs are confirmed by the shifts within the structure of industry in the developing countries where more skill-intensive and modern production has been improving. It is noteworthy that the production of capital goods and basic (intermediate input) products progressed fastest, while the share of agro-food, light industry and oil refining declined during the 1960s and 1970s.

45. In general, therefore, the industrialization of the developing countries is a process that has already begun. In spite of difficult conditions, the ground has been laid and the potential exists for new and significant progress. Developing countries have a wide selection of technologies still to absorb, providing a continuum of investment opportunities among countries with varying stages of development, many natural and human resources to be tapped, and a rapidly growing market demand for

manufactured products. In short, the South could provide a new field for global industrialization, and the massive flow of private capital into developing countries in the 1970s, although now interrupted, confirms such a viewpoint. The industrialization of the developing countries, as called for in the Lima Declaration and Plan of Action on Industrial Development and Co-operation (A/10112, chap.IV), can therefore provide a focal point for economic planning for North and South that would benefit both.

46. The International Development Strategy for the Third United Nations Development Decade (General Assembly resolution 35/56, annex) has concisely set out a growth path for the developing countries until 1990, and it is a path that represents a significant step towards the achievement of the Lima target. The target of seven per cent annual average growth rate in GDP for the developing countries was based upon an analysis that assumed a reasonable growth for the North of an average of 3.7 per cent per annum. It was found that such a set of growth rates for North and South would have many advantages. It would not place impossibly high constraints upon consumption, it would not be unduly limited by the relatively modest expectations for agricultural growth in developing countries, and it would allow a reasonable level of assistance from developed to developing countries in the process. The International Development Strategy thus represents a harmonious growth path which to a considerable degree transforms the present linkage between North and South from one where recession in the North is distributed in a more intense form in the South into one in which both North and South grow at substantial rates.

IV. LONG-TERM PROSPECTS FOR INDUSTRIALIZATION

47. As has been noted in the special issue of the Industrial Development Survey, 3/ the attainment of the Lima target implies a considerable change in the economic structure in the world. However, the example of the centrally planned economies, already referred to, is instructive. Between 1960 and 1982 their share in world MVA rose from 13.3 per cent to 25 per cent. This is taken as indicating a remarkable adjustment potential in the world economy, and it provides a basis for concluding that there is indeed sufficient flexibility in the adjustment process to move towards the Lima target.

48. The achievement of the Lima target implies that the developing countries should grow more quickly in manufacturing than the developed countries. An examination of their performance in MVA growth indicates that the possibilities for achieving higher growth rates indeed exist. The gap was positive, i.e., the growth rate of manufacturing in developing countries was higher than that in developed in every year from 1967 to 1976. In the years 1970 to 1975, the developing countries outperformed the developed in manufacturing growth by almost a sufficient margin, and in four of those years the gap was such that, if sustained, it would be sufficient for the attainment of the Lima target. Indeed, the adoption of the Lima target in 1975 is partly a result of the tide of optimism as to the industrialization prospects of developing countries induced by such a good performance in the preceeding years. However, the share of 11 per cent, now held by the developing countries in total world MVA, representing scarcely any improvement over that in 1975, means that essentially the time period for the achievement of the Lima target has reduced from 25 to 17 years.

49. The Industrial Development Survey notes that, manufacturing growth in developed countries, in the future, cannot be expected to be as high as before 1970 because of the long-term effects of declining investment, decreasing productivity gains and shifts in the structure of final demand, at higher income levels, away from manufactured goods. For the developing countries, the forces at work that may heavily influence their own performances can include the rapid expansion of the manufacturing sector associated with intermediate levels of per capita income and also the dependence of those developing countries that have adopted outward looking industrialization strategies on the developed countries' growth and policies.

50. In connection with the achievement of the Lima target, one of the scenarios prepared in UNIDO, which assumes some return to pre-crisis growth rates but no fundamental alteration in existing structures and policies, reveals that the 1990 share of world MVA would be only 13 per cent. This would more or less mean a return to the status quo that obtained before the present world economic crisis emerged. A restructuring of the world economy cannot be achieved by following old paths.

51. Reference has been made to the International Development Strategy for the Third United Nations Development Decade. An average of 7.0 per cent GDP growth rate for the developing countries, for the decade 1980 to 1990, is the most important assumption of the Strategy. Simulation of this and other elements of the Strategy, i.e., full North-South co-operation as called for during the Third Development Decade, would lead to a share of developing countries in world MVA of 15.6 per cent to 1990, a considerable improvement over the reference scenario. The Third Development Decade figures, thus, represent a step towards the Lima target of 25 per cent in the year 2000, but, even so, still greater gains would be required in the decade from 1990 to 2000 to actually reach the target. This was indeed an assumption in the calculations made within the United Nations system before the adoption of the Strategy, that progress towards development goals in general would be made in stages and that higher growth rates for developing countries should be looked for in the decade 1990 to 2000. Indeed, other calculations show that application of the Strategy growth rates beyond 1990 would lead to a share of world MVA for developing countries of only 19.2 per cent in the year 2000.

52. Given, however, the present state of North-South co-operation, it is not appropriate that simulation of the Third Development Decade should be the only option considered. As already implied in earlier sections of this paper, a reassessment of industrialization strategies, both domestic and international, can be discerned at present in the developing countries owing to the present economic crisis and the lack of co-operation between North and South to resolve it. South-South co-operation, i.e., economic and technical co-operation betweeen developing countries, is not a substitute for full North-South co-operation, but it has become an increasingly important policy option and represents a promising alternative for the developing countries in the present situation. Moreover, the full realization of South-South co-operation would itself contribute to some transformation in world economic relations as a whole by demonstrating that joint actions can produce joint benefits.

53. Some initial simulation of South-South co-operation can be carried out by making assumptions about, in particular, trade relations between developed and developing countries. Subject to reasonable upper limits on production, it is possible to assume that trade is diverted by developing countries from the North to trade between themselves to an upper limit of 30 per cent. In addition, the creation of trade, deriving from increased market sizes and economies of scale, is assumed to take place between the economies of the South. With due consideration for the flexibility of historical patterns of trade and the commodity composition of trade, it is possible to calculate the effects of change on the economies of the developing countries, i.e., the impact upon their GDP and sectoral output of what might be called a "partial delinking" of developing country economies from the developed countries. The indications are that such a scenario would yield a share of developing countries in world MVA of 14.3 per cent in 1990, compared to 13.3 per cent in the reference scenario. While such gains may appear modest, they are, nevertheless, a result of combining historical growth patterns with new directions in international trade and thus point to benefits to be found by developing countries from some measure of improved trade relations between themselves, even without the scientific and technological co-operation and the integrated planning, making maximum use of resources and complimentarities, implied by full South-South co-operation.

V. POLICY AND STRATEGY OPTIONS FOR DEVELOPING COUNTRIES

54. Recent trends in industrialization policies of developing countries emerge, in particular in the monitoring report on progress made in accelerating the industrialization of developing countries. 9/ Among the most noticeable is a general trend towards a comprehensive and systematic approach to the development of industrial technology, including activities for the regulation of technology imports and the promotion of indigenous technological development, with associated institutional development to assist this process. Allied to this, there is a very widespread recognition of the importance of human resources. 10/ In most countries, the role of the public sector has been very important in this regard. Other aspects of overall industrialization policies are also receiving significant attention, such as the establishment and strengthening of specialized research centres and institutes, increased government intervention in the technology transfer process and supporting programmes in technological information.

55. The financing of industrial development is also an important concern. Most developing countries report measures to expand domestic savings for this purpose, which can be regarded as more important than official development assistance as a source of finance for the manufacturing sector. Institutional development in this field continues, and there is virtually no developing country without at least one institution for financing industrial development. However, in this area, the monitoring report concludes:

> "While much has been done to modernize and strengthen the financial infrastructure of developing countries, mobilization of domestic savings has not yet reached the levels needed for sustained growth of the manufacturing sector. Most developing countries continue to depend upon external financing of their industrialization". 11/

56. Industrial export policies are receiving increasing attention, and a clear trend towards more organization, administration and measures to increase the competitiveness of export industries in developing countries is detected. Export processing zones now constitute an important component of policies in many countries; it is estimated that they exist in at least 40 developing countries. This increasing awareness of the importance of exports in industrial growth must nevertheless take account of recent indications that world trade is becoming increasingly discriminatory.

57. From this point of view, economic co-operation among developing countries becomes even more significant. The rapid growth of regional groupings, such as the Andean Pact, the Association of South-East Asian Nations (ASEAN), the Caribbean Community (CARICOM), the Economic Community of West African States (ECOWAS) and the Latin American Integration Association (LAIA) etc., is particularly noteworthy. Economic and technical co-operation among the developing countries is seen to take many forms, in particular as South-South joint ventures, as technological development and information, as financing and as regional energy development schemes. All this is in addition to what is usually the most important feature of such regional groupings - the promotion of intraregional trade between the members of the grouping.

58. While the nature of the monitoring exercise is such that complete information does not necessarily emerge on all aspects of industrial policies in all developing countries, there is a clear indication that a reassessment of policies is underway. The High-Level Expert Group Meeting on Industrial Development Strategies and Policies for Developing Countries emphasized in its recommendations, both national and international policies that could assist progress in industrialization, namely through a revival in the world economy, increased co-ordination of policies at an international level, more aid and less protectionism. 4/ As subject areas demanding particular consideration, technology, human resource development and economic co-operation among developing countries were identified as being of particular importance.

59. As to specifically national measures, emphasis was placed on the development of the internal market; in other words, concentration in industrialization should not be exclusively on exports. It was recognized, however, that this would be a good deal easier for countries that had large populations and were more advanced, since these would have ready-made markets within their own population and be in a position to establish production in new fields directed towards import substitution. For other developing countries, co-operation would be essential for the furtherance of such a strategy.

60. Improvements in technology affect market size and economies of scale and work to the advantage of developing countries. Previous perceptions of minimum plant size have been, to some extent, outdated by technological advance, and, in several fields of industry, recent developments allow a smaller-scale plant to be economically viable. The successful application of mini-hydro plants in the energy field is well known, but small, efficient and flexible mini-steel plants have, over the last decade, taken an increased market share in the industrialized countries. There is considerable scope for the small-scale production of agricultural equipment such as hand tools. At the cost of a quite acceptable reduction in quality, small and mini plants for cement production also appear attractive. Again, the potential flexibility of production and the reduction in transport costs (both for supplies and

marketing) of distributed capacity are important factors enhancing the attractiveness of small-scale industry and may well offset other considerations. Technological research and development in building materials, process industries and capital goods in particular, including special concentration on further reductions in the scale of production, could make many industrialization plans much more feasible.

61. From the discussions at the High-Level Expert Group Meeting, 4/ it is possible to draw some general conclusions as to industrial development strategies and policies for developing countries. The first could be that the increasing interdependence of the world economy (i.e., through trade, finance, technology and the transnational corporations) has narrowed the policy options of individual developing countries, and the current economic crisis is severely hampering them in attempting to devise new courses of action. Most developing countries appear to have concentrated on external growth to the neglect of internal potential; however, new tensions in world trade are, accordingly, causing new attention to be given to internal growth. Financial constraints now constitute very serious obstacles to future progress and may, by reducing drastically the possibilities for importing intermediate inputs, be the fundamental cause of what is now an extensive and alarming under-utilization of capacity in developing countries. The increasing importance of technology and policies to control, exploit and develop capacity for the benefit for overall industrialization in developing countries can be clearly recognized. Equally relevant has become the need for greater efficiency in the planning and implementation of industrial development.

62. In general, it may be said that there is no one strategy suitable for all developing countries. But it is possible to go further: it may be that no one country can have a one-dimensional industrial strategy. A balanced and integrated mix of priorities and time horizons is needed. An appropriate strategy for a country may include a mix of low- and high-level technology, domestic and foreign inputs, external and internal markets, North-South and South-South trade and finance and industrial and agricultural priorities. The focus may, therefore, be on bringing about a new technology mix, with high-level technology and export orientation on the one side and more traditional technologies and products oriented towards the internal market on the other. These approaches would be planned and integrated in a harmonious manner, in such a way that they support one another and, together, make the best use of available resources.

63. At the international level, the call must continue for new international support and greater co-operation between developed and developing countries and between the developing countries themselves. Particularly important also would be a new transparency of development and adjustment policies in both the North and the South; the planning of industrialization that includes any significant development of the external sector is impossible when drastic policy changes elsewhere cannot be foreseen.

VI. INTERNATIONAL CO-OPERATION: NORTH-SOUTH AND SOUTH-SOUTH

64. Any analysis of the possibilities for accelerated industrialization of the developing countries, in particular to achieve the Lima target, will recognize the importance of the role of the developed countries in such a process. They have, at present, an overwhelming dominance in world industry, especially of its key component, technology. Particularly through the activities of transnational corporations, they have immense control over much that happens in world industrialization. Their own large markets constitute a potential for the exploitation of developing countries' comparative advantage in many aspects of manufactures trade, though this at present is limited by policies of protectionism. Their control of the world financial markets also has an important influence on the investment policies of developing countries for their own industrialization. Moreover, the high income levels of developed countries mean that they are, in principle, able to provide greatly increased official development assistance, which would be of particular benefit to the least developed countries. Co-operation between developed and developing countries, while it is, as has been noted in the monitoring report, extensive, especially in official development assistance, technical assistance, training or the development of human resources, is nevertheless capable of significant increase. If this were allied to a new and more general spirit of co-operation between developed and developing countries, in particular by a greatly increased flow of resources to developing countries, by opening the markets of developed countries to new exports of manufactures from the South and by policies of structural adjustment that recognized the shifts in comparative advantage that are taking place in the world industry, then the benefits would be enormous. Both North and South could proceed harmoniously, on a path of expansion such as was outlined in the International Development Strategy that allowed the best use of the world's resources. Such policies could transform the present nature of interdependence, an unequal one that makes the South vulnerable to the North, into a new mode of equity that allows both parts of the world to grow to their maximum potential.

65. The developed countries have, therefore, a crucial role to play. The revival of their own economies would lead to an immediate benefit for developing countries, by expanding the demand for their exports. It would also lead to a relaxation of protectionist pressures in developed countries and lay the ground for more positive restructuring policies. A harmonious revival in industrialized countries should be accompanied by new co-ordination in the financial sphere. More predictability in exchange rates and interest rates was a characteristic of the period in which developing countries made most rapid progress: a restoration of stability in this area could reduce the vulnerability of developing countries and allow stable planning for development. It is worth noting that the severe financial crises of developing countries are of very recent origin: the combination of sudden surges in interest and exchange rates, with a slump in external demand, caused the dramatic and dangerous increase in their external debt. International action to stabilize the financial system is essential for the developing countries and would equally benefit the developed

66. Again, a renewed call must be made for increases in assistance to the developing countries. There must be at least the fulfilment of the commitments for technical and financial assistance made in the International Development Strategy. Such assistance is urgently needed, both for those

countries at present facing financial crises and for the least developed countries as a group, which have no other alternative if their immediate difficulties, especially in the area of food and energy supplies, are to be overcome. The main rationale of such assistance is the mutuality of benefit between developed and developing countries in that it would contribute to a demand for the exports of the latter and the revival of their economies.

67. But this action, on the part of the developed countries, is essentially of a shorter-term nature. The need will remain for planned changes in the structure of the world economy to release its full potential, especially through the industrialization of the developing countries. In this context, the role of technology is of central importance. It is technology which determines the nature both of the manufacturing process and of its products. It is also the rapid developments in this field that have brought about the need for structural change in the world economy and will continue to do so at an increasing pace. The changing patterns of comparitive advantage in the world, exemplified by the increased role of the developing countries in world trade of manufactures, have been brought about by the diffusion of industrial technology. The abundance of labour in developing countries allowed their manufactures in such fields as textiles, clothing and other consumer goods to compete on international markets and increase their share. But new technologies, especially in such fields as microelectronics and its applications in process control, are reducing the labour content of production. If the developing countries do not have access to these, then their comparitive advantage in certain manufactures will be eroded and the vulnerability of the South will be once more increased.

68. At present, owing to the overwhelming dominance of developed countries in this field, action on their part to increase technology availability is essential for industrialization of the developing countries. Co-operation in this field must be seen as "...contributing to and maximizing the benefits of global interdependence." 12/ Without access to technological advances by one part of the world, the global potential of industrialization would be frustrated.

69. The recent recession in many developed countries has caused a retrenchment and, in particular, the curtailment of expansion in flows of resources to the developing countries. The growth of protectionism, as has been mentioned, is a negative but widespread feature of world markets. Clearly, a full and sustained revival in the economies of the developed countries would provide important benefits to the developing countries, and such a revival is very much to be hoped for. Nevertheless, the difficulties faced by the developing countries are so severe that they cannot afford to wait until such a revival occurs. For this reason economic co-operation between developing countries themselves has become imperative, particularly in industry, where difficulties of economies of scale, market size, access to technology and mobilization of financial resources seem especially amenable to joint action by the developing countries.

70. The courses of action for the South must include consideration of how their collective strength can be utilized in their own interests and towards their own goals. Growing complementarities between the countries of the South in industry mean that a new collective effort could provide the basis for an alternative development path. However, South-South co-operation should not be regarded as a substitute for full North-South co-operation, but rather as a step towards world co-operation.

71. The following suggestions for new directions in South-South co-operation are not intended to be exhaustive, but it is hoped that they may stimulate consideration of ways in which co-operation between developing countries could make improved use of their resources and, most importantly, reduce their present vulnerability and exposure to crises not of their own making. The proposals range from simple joint measures in institutional development, involving relatively small initial commitments, to more elaborate schemes of co-operation that, if pursued fully, could lead to a significant transformation of the present system of economic relations both among developing countries and between North and South. Many of the issues first raised here may be discussed in more detail at a later stage at the Fourth General Conference, if it is thought useful to do so.

A. Capital goods*

72. The developed countries at present have an overwhelming dominance in international trade in the capital goods sector. New co-operation between the countries of the South, which would amount to a switching away from traditional sources of supply, could stimulate production in this vital area in which the South has, at present, an enormous deficit.

73. A conventional view is that developing countries do better in the production of labour-intensive goods in small-scale firms with unskilled or semi-skilled labour at best. Capital goods production requires capital intensity, large-scale firms and high-level skills. Hence, it is argued, capital goods production is not suitable for developing countries in general. The small share of world capital goods production held by developing countries at present, is quoted to support such reasoning. But more careful examination of the past record in capital goods production and trade suggests the viability producing capital goods in the South.

74. Many capital goods require a below-average capital intensity, such as agricultural machinery, office machinery, metalworking machinery and ships and boats of various sizes. Small firms are as efficient as large firms in producing woodworking machinery, conveyors, dyes, tools and jigs etc. Small firms are often costefficient owing to firm-specific managerial quality, plant layout and local availability of information. Skill-intensive goods (i.e., those using a high level of skilled labour) are being produced by several developing countries. Developing countries producing different capital goods can complement each other, should they adopt a policy to that effect. Indeed, the evidence is that capital goods trade in developing countries has grown faster than trade in other manufacturing sectors. For instance, engines tripled in export values (current prices) and agricultural machinery doubled, between 1975 and 1978, in almost all capital goods producing developing countries. Other categories with a particularly impressive export performance were special industrial machinery, other special machinery, electric power

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* Capital goods are here defined as International Standard Industrial Classification (ICSC) major groups 382, 383, 384, 385 and 390, i.e., including most industrial machinery and transport equipment.

machinery, telecommunications, other electric machinery, motor vehicles, ships and boats. In spite of the small share of the developing countries in world capital goods production at present, these are promising indications.

75. The importance of capital goods production in the South is not only because of such static criteria as factor intensity, factory size, cost etc. The dynamic effects of capital goods production, although difficult to measure, are considerable. The first is the efficiency-augmenting effect of "learning-by-doing". The capital goods sector can be said to be richest in such learning-by-doing benefits compared with any other manufacturing subsector. The sector is characterized by dynamic linkages with other sectors of the economy. It also provides the entrepreneurs for small, technologically intensive industries. Furthermore, it can also stimulate the creation of skills, as well as of demand, through higher wages to skilled labourers.

B. Natural resource-based industries

76. Many natural resources are plentiful in the South, including petroleum, potash, phosphate, iron and other metals, and these form the basis of the important refining and petrochemicals, fertilizers and metallurgy industries, respectively. The availability of raw materials poses few problems, at least up to the year 2000, and reserve findings have more than kept up with consumption. At present, excess capacity characterizes the world market in most of the processing sectors, but, nevertheless, the South imports a substantial amount of processed products from the North. This is particularly true in petroleum refined products, petrochemicals of all sorts and specific aluminium, copper, iron and steel products. This anomaly seems to be due to a market structure dominated by transnational corporations and also to a lack of information among the developing country actors (producers, consumers and traders). Accordingly, to short-circuit the product flow by direct transfers from sources in developing countries to consumers in developing countries would seem an important area for South-South co-operation. The benefits of steady supplies in processed minerals and of trade and transport margins would then fall directly to the South.

77. More detailed possibilities for South-South co-operation can be found in the energy-intensive and capital-intensive mineral processing areas. The Middle East, for instance, could be a most significant economic force in South-South co-operation, since this region has the energy resources and capital funds needed in a field at present dominated by transnational corporations. Energy resources that are at present wasted in the form of gas flares and refinery residues could be used for smelting minerals from other regions, notably aluminum, copper, iron etc. Such vertical integration of key resources, subregionally and interregionally, could provide added bargaining power for the South.

C. South-South co-operation in industrial input management: oil and minerals

78. Traditionally, crucial inputs to industrial sectors of the South have been supplied by the North, including petroleum products, processed mineral products, technological know-how and industrial services. Strategies to

strengthen the collective self-reliance of the South could take many different forms. For oil, for example, a strategy might be to charge the same international price but allow oil-importing developing countries to pay a part of their oil bill in local currencies. This would tend to encourage both South-South trade and financial co-operation. The role of local currencies in general is discussed in a later section.

79. In the case of both oil and some other mineral resources (e.g., tin and bauxite) with large deposits in the South, the vast financial surplus of the low-absorber countries members of the Organization of Petroleum Exporting Countries (OPEC) could be used to buy future claims on these minerals which would not be mined at present. This would avoid, or at least postpone, logistical problems of storage, transport and marketing. The surplus of OPEC could thus be more imaginatively used to enhance the international market power of OPEC, and non-OPEC developing countries would gain in terms of assured future markets and perhaps also in terms of prices higher than their present collapsed levels.

80. Such long-term "futures contracts" claims on oil and other significant exhaustible minerals in the non-OPEC South, which can be purchased with the OPEC liquid surplus, will produce a far more favourable climate for the industrialization of the South. It will allow the South to have better control over international raw material prices and physical location of raw materials. At present, there is immediate pressure on most developing countries to earn foreign exchange by selling such raw materials, no matter what the international price may be. Such long-term contracts would provide the essential time-horizon for industrial planning in the South and allow developing countries to process and increase value added from their minerals. Collective as well as national self-reliance would be enhanced.

D. Complementarity as a basis for joint ventures

81. The concept of South-South co-operation in industrial production is based on the fact that individual developing countries are constrained by smallness of the market on the demand side and a lack of complementary input factors on the supply side. Co-operative schemes would bring together complementary input factors from other co-operating countries so that a production unit could be made complete. South-South joint ventures, owned and managed by developing countries, can provide the best means of realizing such an objective and, in particular, the production constraints found in the capital goods and mineral processing sectors could best be overcome by South-South joint ventures. This form of co-operation may be superior to customs unions and other forms of market integration schemes.

82. In order to ensure reciprocity in such joint ventures and allow their benefits to reach as many developing countries as possible, a list of joint ventures might be drawn up, based on the availability of specific resources such as raw materials, skills and know-how. The host country could then invite other developing countries to participate in the exploitation of complementary factors and in the expected returns. Negotiations would involve many items including an equity ownership, technical assistance, provision of capital funds, marketing underwriting, long-term purchases, barter

arrangements, tariff preferences etc. The main objective would be to maximize such exchanges and to achieve a fair distribution of benefits. In these negotiations, the UNIDO System of Consultations might be used to provide preliminary services and, thus, the scope of the present system would be expanded to inter-sectoral issues.

83. Another variant of production co-operation could apply the economic principle of willingness to pay. Thus, either a specific industry or a whole related complex of vertically integrated industries would become part of a scheme of industrial licences for a group of developing countries as a whole. Among the potentially interested countries, the highest bidder would be given the licence to establish the industry. But the bids would be made in terms of future output of the industry to be eventually delivered to the other countries of the group. Thus, each country would assess its own potential benefits from the possession of such an industry with an expanded market and make an offer, in terms of the potential products, to its partners. Such a licensing system would thus ensure an automatic contribution by the highest bidder country in exchange for the privilege of the wider market, created by an elimination of tariff and non-tariff barriers in the group of developing countries concerned. Thus, national self-interest and collective interests could be reconciled.

E. Local currencies and South-South trade

84. Developing countries have a chronic need for foreign exchange to facilitate trade transactions. The scarcity of hard currency often blocks potentially beneficial South-South trade, owing to balance-of-payments difficulties. As a means of overcoming such difficulties, the settlement of international transactions in local currencies is one important option. The advantages of this arrangement are many. It eliminates transaction costs in finance, i.e., the fees paid to foreign-exchange dealers and the interest foregone (or paid on loans) to keep adequate reserves for transactions and credit-worthiness. The risks and uncertainties of exchange-rate fluctuations caused by "hot money flows" can also be avoided, and the burden of correcting trade imbalance would be equalized between surplus and deficit countries. Such arrangements would be flexible in as much as the proportion of local currency payments could be agreed upon, ranging from a moderate percentage to 100 per cent. Such an approach would be a temporary measure, its object being to bring about a rapid increase in world aggregate demand from its present depressed level. The best long-term solution is still a global, multilateral, clearing-house arrangement, a world currency. However, the use of local currencies would reverse sacrifices of production, trade and growth at present forced upon developing countries by the existing financial system. General trading organizations may be in the best position to initiate the use of local currencies as a medium of exchange.

85. General trading organizations for developing countries offer considerable scope for South-South co-operation, especially in industrialization. The United Nations Conference on Trade and Development (UNCTAD) has already given extensive consideration to the possibilities for such organizations. Institutional factors tending to inhibit South-South trade expansion include: uneven and biased information and marketing networks, inadequate communication, transportation; banking and insurance

systems; medium of exchange constraints; and tariff and non-tariff barriers. The reduction or elimination of these obstacles is crucial to reduce search costs and transaction costs at present insurmountable for many traders in developing countries. General trading organizations could not only help to eliminate these difficulties but provide a framework for the use of liquidity created by local currency payments schemes.

F. Technology institutions

86. The future-oriented management of technology appears crucial for the self-reliance of the South, especially the new wave of technological development in, e.g., microelectronics, biotechnology and information technology. International research and training centres based on co-operation between the countries of the South should be set up in these areas. Such centres would emphasize basic research and training, so that the indigenous technological capability of the South can increase over time. At the same time, they would at least partly reverse the "brain-drain" from developing countries. Without such concerted efforts, the third world will become helpless observers of new and emerging technologies.

87. The way out of the South's technological dependence must include the development of a technological capability in all production stages from design to actual production capacity. Industrial design centres should be set up through South-South co-operation on an imaginative basis. They should not be restricted to developing blueprints for technology but instead have a wider perspective of design as an integrated techno-economic process: each product-design would be looked upon as a vertically integrated industrial process involving at least all the major manufacturing production stages (of all developing countries, not only domestic stages). By taking this wider view of the whole process rather than products at individual stages, technological co-operation and industrial co-operation between developing countries can be integrated for mutual benefit.

VII. CONCLUSIONS

88. The experience of world industrialization since 1975 can be summarized as follows. The developing countries have continued their efforts to industrialize, which had led in the early 1970s to good performances in the manufacturing sector. But, even though a basis has been established for further growth in the future, the unfavourable conditions in the world economy in recent years, combined with domestic difficulties, have meant that progress towards the achievement of the Lima target has been disappointingly slow.

89. As has been seen, the impact of the current crisis in the world economy upon the industrialization of the developing countries has been most severe. Recession, reduced demand for the exports of developing countries, a spreading protectionism that further adds to the difficulties of expansion, high interest rates that exacerbate balance-of-payments difficulties and a consequent reduction in imports of intermediate inputs, which has led to substantial underutilization of the capacity so painfully acquired, are all

aspects of the down-turn in the world economy that appear to have frustrated many of the hopes for industrialization in the developing countries. To these must be added such domestic difficulties as have been identified, in particular the lack of suitable infrastructure, human resources and, in some cases, inadequate links with other sectors or, as in the case of agriculture in some countries, a neglected sector that now poses great problems for the economy as a whole, using up vital resources that could otherwise have been applied towards industrial growth.

90. It has been noted that current difficulties in industrialization are inducing a reassessment of policies in developing countries, at both the national and international level. And, indeed, the current crisis provides an opportunity for such a re-examination of the merits of courses of action that have been followed in the past. At a national level, there are indications that more attention should in future be given to the growth of the internal market and that excessive concentration on the external sector, which has severely shown its unreliability in the present crisis, is to be avoided. It is, of course, clear that a strategy of industrialization that is more focused on satisfying the needs of the internal market is far easier for those countries where that market is large and where some flexibility in the industrial structure and some experience in new initiatives are already to be found. For smaller developing countries and for those at a less advanced stage of industrialization, co-operation with other developing countries can be seen to be of particular importance. Such co-operation, while helping them to overcome the smallness of their individual markets, could also lessen the problem of paying for their imports from the developed countries.

91. Economic and technical co-operation among developing countries thus can be seen to receive an impetus from two levels, the national and the international. The need to provide, in national industrial strategies, for an adequate mix of import substitution and export concentration impels consideration of regional integration schemes, by smaller and less advanced developing countries in particular. Equally, the lack of progress in achieving full North-South co-operation for economic development and the achievement of the new international economic order gives special urgency, at an international level, to the establishment of productive South-South co-operation, especially for industrialization and associated areas. South-South co-operation can provide a means for developing countries, both to reduce their dependency on the developed world and also to exploit, through their own energies, the abundant resources in principle available to them.

92. Nevertheless, it is precisely because of the rich industrialization potential in the developing countries that co-operation between both North and South can be so beneficial for the world economy as a whole. A new impetus to South-South co-operation should ideally be regarded as a part of global co-operation. For the industrialization of the developing countries is a process which, if undertaken collectively by the world community, would provide significant benefits to all parts of it. The implementation of the Lima Declaration and Plan of Action on Industrial Development and Co-operation (A/10112, chap.IV), and the achievement of the Lima target, could, if undertaken in a new spirit of co-operation, provide a harmonious growth path in the future for both North and South.

Notes

1/ Overcoming Economic Disorder (ST/ESA/133), para. 110.

2/ UNIDO/PI/38, para. 28.

3/ Industry in a Changing World: Special Issue of the Industrial Development Survey for the Fourth General Conference of UNIDO (United Nations publication, Sales No. E.83.II.B.6).

4/ See Report of the High-Level Expert Group Meetings preparatory to the Fourth General Conference of UNIDO: Industrial Development Strategies and Policies for Developing Countries, Lima, Peru, 18-22 April 1983 (ID/WG.391/12).

5/ World Economic Survey 1983, (United Nations publication, Sales No. E.83.II.C.1), p.1.

6/ Ibid., p.53.

7/ World Bank, World Development Report 1983, p.21.

8/ Report of the High-Level Expert Group Meetings Preparatory to the Fourth General Conference of UNIDO: Industrial Development Strategies and Policies for Developing Countries, Lima, Peru, 18-22 April 1983 (ID/WG.391/12), para. 14.

9/ Follow-up to the Third General Conference of UNIDO and the Eleventh Special Session of the General Assembly: Monitoring progress made in accelerating industrialization in the developing countries (1981-1982) (ID/B/295/Add.2).

10/ See the Report of the High-Level Expert Group Meetings Preparatory to the Fourth General Conference of UNIDO: Accelerated Human Resources for Industrial Development, Yaoundé, United Republic of Cameroon, 30 May-3 June 1983 (ID/WG.394/8).

11/ Follow-up to the Third General Conference..., op.cit., para. 39.

12/ Report of the International Forum on Technological Advances and Development, (ID/WG.389/6), para. 87.