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CRITICAL REVIEW OF  
AFRICA'S INDUSTRIAL PERFORMANCE\*

Background Paper

Prepared by  
the UNIDO Secretariat

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## SUMMARY

In the introduction, the paper describes the evolution of the industrialization process in Africa from the pre-independence era up to the present post-independence period. The course of history led to the search by African political leaders and decision-makers for a new approach to the region's industrialization, culminating in the adoption of the Lagos Plan of Action and the Final Act of Lagos, as well as in the proclamation of the 1980s as the Industrial Development Decade for Africa (IDDA). A brief description is given of the IDDA programme, along with the main features of the activities carried out during the preparatory (1982-1984) and the implementation (1985-1990) phases of the Decade programme.

The paper focuses on a critical review of industrial performance in Africa during the 1980s, drawing on information contained in the report of the experts on the independent mid-term evaluation of IDDA and the proclamation of the second IDDA (document CAMI.9/20/Add.1:ICE/1989/20/Add.1). The review touches on the overall economic performance of Africa which has greatly affected performance in the industrial sector. Beset with serious economic crises, natural disasters, mounting external debt and unfavourable external environment, only minimal progress has been made in the industrialization of Africa, despite the policy measures and structural adjustment programmes carried out by several African countries.

During the 1980s, manufacturing valued-added (MVA) in the region has been growing on average by just over 4 per cent per annum. The region currently accounts for only about 1 per cent of global manufacturing output, as compared to the minimum target of 2 per cent by the year 2000 derived from the Lima Declaration and Plan of Action, and the mid-term target of 1.4 per cent by the year 1990. Sub-Saharan Africa accounts for a mere 0.3 per cent of global manufacturing exports. This overall unsatisfactory performance has also been affected by the very low growth of agricultural value-added (AVA) which on average amounts to only 0.9 per cent per annum for the entire region, as compared to an average annual population growth rate of 3 per cent.

The paper analyses the various constraints encountered in the industrialization of Africa. These relate, in particular, to: inadequate industrial policies, strategies, planning and institutional infrastructure; limited financial resources; under-utilization of installed industrial capacities; inadequate industrial skills; low technological negotiating capabilities; inadequate industrial and technological information; constraints at the subregional level; and external constraints.

The paper also describes a number of critical lines of action that would contribute to accelerating the pace of industrialization in the region. Guided by the priorities established by the African leaders themselves and drawing on the recommendations of the experts on the independent mid-term evaluation of IDDA as well as on the vast experience of UNIDO, the actions proposed are aimed at helping African countries to 'design and construct' internal engines of growth, thereby ensuring the local generation of the factor inputs required for industrial development and, indeed, for economic development as a whole.

The critical lines of action suggested would contribute to overcoming the constraints encountered in the industrialization of Africa with priority accorded to: industrial policies, strategies, planning and institutional infrastructure; establishment of core and agro-related industries; industrial rehabilitation and maintenance; development of human resources; development and acquisition of technology; development of energy resources; development and promotion of small- and medium-scale industries and entrepreneurial capabilities; mobilization of financial resources; intra-African co-operation and integration; co-operation among developing countries; and the promotion (publicity) of Africa's industrialization.

In conclusion, the paper draws attention to the renewed commitment of African decision-makers to accelerating the industrialization of the continent by proclaiming the period 1991-2000 as a second IDIA as well as establishing an Africa Industrialization Day. That decision is based on the experience of the past decades when African countries failed to achieve any significant progress towards the industrialization of their region. It is also based on the conviction that the only lasting viable solution to the economic and aggravating debt crisis in Africa lies in the accelerated industrialization of the region.

The above is, furthermore, predicated on recognition of the far-reaching consequences that the dynamic changes taking place in global, political and economic relations bear for Africa, in particular the emergence of economic blocs and 'fortresses' and plans for a more economically integrated Europe by 1992 and increasing West-West and East-West economic relations.

There is, thus, an urgent need for each African country to devise and implement a sound industrialization programme within the framework of the programmes for the second IDIA and for the Africa Industrialization Day. It is expected that the entire international community will rally round the African countries and lend them the necessary support in mapping out their new path towards accelerated industrialization.

## I. INTRODUCTION

1. Before independence, in the early 1960s, African political leaders made strong representations to the colonial Governments for a form of industrialization that placed emphasis on the local processing of abundant primary export commodities. The objective of the first African approach to industrialization was to seek increases in public revenue by raising the level of export earnings in order to facilitate public expenditures. The approach did not relate to a wider utilization of local raw materials, increased employment, the acquisition of technology, the elimination of enclaves, the need to develop the capital goods industries, nor to the need for self-reliance and self-sustainment. Furthermore, at that time, there was no fully-fledged concept of the transformation of national economies as a whole nor of the role of any particular form of industrialization in the transformation process. Examples of industrializing third world countries were unknown or unfamiliar to Africa's political leaders and decision-makers at that time.

2. By the mid-1960s, African Governments had conceived bolder plans and programmes for industrialization. They had accepted from external advisers the guiding principle of selecting products for local manufacture for which an import market had already been established. Since there were few, if any, African businessmen capable of, or willing to, accept entrepreneurial responsibility for such projects and since locally-based foreign enterprises were also unable or unwilling to do so, Governments invited foreign enterprises from abroad to help preparing feasibility studies, with designing, planning and managing the project, and with managing the enterprise in joint partnership with Government. Import substitution provided for the utilization of some local (especially agricultural) raw materials. It provided for some increase in employment and was sometimes assumed to be a policy for encouraging technology inflow. The net gain in terms of foreign exchange earnings was, however, doubtful. Management (including procurement, production, marketing, finance) was usually, by contractual arrangement, entrusted to foreign partners. Protection levels were high, especially when import substitution came gradually to include the assembly of consumer durables.

3. There were overlaps in the period between processing for export and processing for local consumption. The former included oilseeds, timber, ores and metals, petroleum and gas. The latter included textiles, food products, shoes and leather products, some building materials, sugar and confectionary. The industries were mostly in the area of light industries and were heavily dependent on imported and increasingly expensive factor inputs. This short, illustrative list could also be used to identify those products dependent on imported materials, entrepreneurship, technology, and professional high- and middle-level manpower. The most significant of these included consumer durables, most building materials, and soft drinks. Equipment, parts, implements and tools for virtually every kind of industrial process and for virtually all sectors were imported.

4. Import substitution was organized on a national basis and was made possible by highly skewed patterns of income distribution. The failure to generate factor inputs of domestic origin meant that employment and income multiplier effects of factor input use remained external to the country paying for the final product. On these three counts, therefore, import substitution

did not take account of the need to expand domestic markets or to combine them. As regards the transmission of skills and the mastery of operating technology, the restriction of import substitution enterprises to assembly or packaging ensured that the manufacturing process involving the mastery of technology (particularly of engineering and chemical technologies) was excluded from local operations.

5. Import substitution policies and practices, therefore, did not have a positive effect on the development of national capabilities for: project preparation, planning, management and construction; sub-contracting; mobilizing and deploying savings (i.e. real factor inputs); establishing essential linkages; and developing support services. Furthermore, there was the persistence of at least three major structural weaknesses: dependence on a few primary export commodities; dependence on broadly the same markets for selling primary commodities and for buying capital and consumer goods and services; and the persistence of enclaves, semi-enclaves and dysfunctional relations within national economies. The efforts launched by Governments to initiate industrial development in the mid-1960s and early 1970s did not therefore seem to be self-sustaining.

6. In the light of the above, there is a growing conviction among policy-makers, economic planners and publicists in Africa that no region so well endowed with natural resources could justify the growing poverty of its populations and its own increasing dependence on the weakening North-South engine of growth. In this connection, it is to be noted that the developed countries not only produce goods and services primarily to meet domestic demand and depend on their domestic markets for the consumption of a very high share of national production, but they are also dependent on domestic sources for an even higher share of factor input supply. Indeed, this would seem to be the basis of the concept of markets and market effects. Furthermore, it can be observed that in other regions developing countries are taking initiatives in, and successfully carrying through, processes of industrialization that include the development of capital goods industries. Although Africa's natural resources are still inadequately explored and assessed, it is clear from what is known that the region's natural resources are considerable and stand in favourable relation to population size and potential consumption.

## II. SEARCH FOR A NEW APPROACH TO THE INDUSTRIALIZATION OF AFRICA

### Lagos Plan of Action and Final Act of Lagos

7. Faced with the situation described in chapter I and determined to undertake measures to bring about a basic restructuring of the region's economic base, the OAU Heads of State and Government adopted the Monrovia Declaration of Commitment which constituted a comprehensive regional approach based primarily on collective self-reliance. By so doing, they recognized the need to take urgent action so as to provide the political support necessary for rapid self-reliance and self-sustaining development and economic growth. They accordingly adopted the Lagos Plan of Action and the Final Act of Lagos which provide the policy guidelines and constitute the political framework for the region's accelerated economic development.

8. In recognition of the pivotal role which industrialization will play in the economic development of the African countries, African Governments ranked



industrialization second among the priorities in the African strategy for the Third United Nations Development Decade, first priority being accorded to self-sufficiency in food production. This high priority accorded to industrial development is fully reflected in the Lagos Plan of Action. Thus, paragraph 56 of the Lagos Plan of Action asserts that "the industrialization of Africa in general, and of each individual Member State in particular, constitutes a fundamental option in the total range of activities aimed at freeing Africa from underdevelopment and economic dependence. The integrated economic and social development of Africa demands the creation, in each Member State, of an industrial base designed to meet the interests of the country and strengthened by complementary activities at the subregional and regional levels". Furthermore, in the Final Act of Lagos, industry was selected as one of the priority sectors for continental integration during the 1980s.

9. The long-term objectives for the industrial sector set for the region in the Lagos Plan of Action call for an increase to at least 2 per cent in the region's contribution to world industrial production by the year 2000, the corresponding share being 1.4 per cent by the end of the Decade. African countries are urged to do everything in their power to achieve self-sufficiency by 1990 in the food, building materials, clothing and energy sectors, while during the first half of the Decade the foundation was to be laid for the phased development on the following basic industries essential to the achievement of self-reliance: food and agro-industries, building industries, metallurgical industries, mechanical industries, electrical and electronic industries, chemical industries, forest industries and energy industry.

Proclamation of the Industrial Development Decade for Africa (IDDA)

10. Conscious of the need to translate the development targets set in the Lagos Plan of Action and the Final Act of Lagos into effective action, the Heads of State and Government proclaimed the 1980s as the Industrial Development Decade for Africa (IDDA) with the purpose of focusing greater attention upon the industrialization of Africa, and mobilizing greater political commitment and financial and technical support at the national, regional and international levels. At its thirty-fifth session, the General Assembly adopted resolution 35/66B formally proclaiming IDDA at the international level.

11. The adoption of the Lagos Plan of Action and the Final Act of Lagos as well as the proclamation of IDDA represented Africa's own initiative towards a new approach to its economic development. The multiple objectives of the Lagos Plan of Action and IDDA include: reducing Africa's external debt and its dependence on external demand stimuli and factor input supplies, as well as the internalizing employment and income multiplier effects. This implies the design and construction of an internal engine of growth which, in simple terms, would comprise the following:

- (a) The deliberate enlargement and consolidation of domestic markets and their combination, through economic co-operation, into markets capable of accommodating economies of scale essential for core industries serving multinational needs;
- (b) The establishment of core industries generally on a multinational basis;

- (c) The local linkage (intra-sectoral and inter-sectoral) of core industries with strategic sectors such as agriculture; transport and communications; building and construction; mining; fuel and power; water supply; and the engineering, chemical and metallurgical sectors;
- (d) A steadily expanding volume and variety of production and use of factor inputs of domestic origin (viz. entrepreneurship; management, procurement, production, marketing and distribution; R & D; manpower; raw and intermediate materials; equipment, parts, implements and tools; technology; physical infrastructure; institutional infrastructure and services);
- (e) The development of a number of critical national capabilities (human and institutional) for: project identification, development, management and construction; negotiating foreign direct participation; the mobilization and redeployment of financial resources; regulating or influencing flows of factor inputs; support services for the public and the private indigenous sector; monitoring the pace and direction of economic growth (including the progress of self-reliance and self-sustainment) and living standards.

12. The design and construction of internal engines of growth place particular emphasis on the use of domestic factor inputs rather than imported inputs whose foreign exchange costs are continuously rising. The use of factor inputs of domestic origin would also help to internalize the employment and income multiplier effects which now operate in the countries of origin of goods and services, and greatly contribute to the growth of domestic markets.

#### Formulation and adoption of the programme for IDDA

13. Following the proclamation of IDDA, the Conference of African Ministers of Industry adopted at its sixth meeting a framework for the formulation and implementation of a programme for IDDA. The programme, which has been printed and widely circulated by UNIDO as document ID/287, was also endorsed by the OAU Summit at its twentieth ordinary session in November 1984. It is divided, for planning purposes, into two phases: a preparatory phase (1982-1984) and the implementation phase (1985-1990). Guidelines outlining the priority activities to be carried out during the implementation phase of the programme were subsequently drawn up and adopted by the African Ministers of Industry.

#### Activities during the preparatory phase (1982-1984)

14. During the preparatory phase of the programme, a number of countries took steps in preparation for the implementation of the Decade programme. Many established National Co-ordinating Committees and Operational Focal Points, and others incorporated in their national industrial development plans and programmes the principles and ideas contained in the programme for the Decade.

15. At the subregional level, steps were taken to strengthen subregional industrial co-operation. An initial integrated industrial promotion programme (document ID/CONF.5/CRP.1) was drawn up following four subregional meetings organized in late 1983 and early 1984 by UNIDO, in co-operation with ECA and OAU, the lead subregional organizations. The subregional programmes were

endorsed by the Conference of African Ministers of Industry and subsequently welcomed by the Fourth General Conference of UNIDO. They have subsequently been revised.

16. At the international level, assistance was provided, largely by UNIDO, to African countries and intergovernmental organizations in the formulation and implementation of their programmes for the Decade. The assistance provided related, in particular, to: the provision of technical advisory services; the adjustment of industrial strategies and policies; the development of pilot and demonstration plants; the development of industrial manpower and technological capabilities; the strengthening or establishment of industrial institutional infrastructure; the preparation of industrial studies; and the formulation of an initial integrated industrial promotion programme at the subregional level. Special efforts were made to popularize the Decade both within Africa and without. Investment promotion activities, including investment fora and solidarity meetings, were organized as a means of assisting African countries to mobilize financial resources for their Decade programmes and projects.

#### Activities during the implementation phase (1985-1990)

17. On the basis of the activities carried out during the preparatory phase of the Decade programmes, activities during the implementation phase have focused on the local development of factor inputs. Special emphasis has been accorded to: the promotion and realization of intra-African industrial co-operation; adjustment of industrial strategies, policies, plans and institutional infrastructure; development of core industries in such areas as metallurgical, engineering, chemical, building materials and capital goods industrial sub-sectors and branches based on the processing of local raw materials; development and promotion of small- and medium-scale industries and entrepreneurship; development of human resources and technological capabilities for industrial development; mobilization of financial resources; and the enhancement of intra-African industrial co-operation based on the subregional integrated programme formulated during the preparatory phase.

18. In carrying out the above activities, special attention has been accorded to the attainment of self-sufficiency in food production, which was accorded the highest of all priorities in the Lagos Plan of Action. To this end, in developing national and subregional programmes for the implementation phase of the Decade, priority has been accorded to: food production, processing, distribution and conservation; health care industries; repair and maintenance, and rehabilitation of viable industrial plants.

### III. CRITICAL REVIEW OF AFRICA'S INDUSTRIAL PERFORMANCE DURING THE 1980s

19. In adopting the programme for IDDA at Addis Ababa (Ethiopia) in 1981, the Conference of African Ministers of Industry called for a mid-term review and appraisal of the programme. That call was renewed by the Conference of African Ministers of Industry at its eighth meeting in Bujumbura (Burundi) in 1986. The evaluation exercise was carried out during 1988/1989 and the report issued as document CAMI.9/20/Add.1:ICE/1989/20/Add.1. That report provides useful information for the critical assessment of industrial performance in Africa during the 1980s.

### Overall economic performance in Africa

20. The performance of the industrial sector during the 1980s has been greatly affected by the overall performance of African economies. Notwithstanding the extensive policy reforms and restructuring processes initiated over the past few years, economic performance in Africa has been generally disappointing. The adverse effects of domestic constraints on productivity and of external constraints on resource availability have combined to outweigh any positive impact of policy reforms. The list of domestic impediments is well known: weak infrastructure, lack of skills, import-dependence, proneness to drought and rapid population growth. Yet the triad of declining commodity prices, inadequate foreign resource flows and the mounting debt burden has stifled economic growth in the region still further. Indeed, the external resource constraint is emerging as one of the most critical development obstacles in the region.

21. In percentage terms, the region's gross domestic product (GDP) grew by only 1.0 per cent in 1986 and 1987 and rose to about 2.7 per cent in 1988. This overall picture, however, tends to blur the stark differences in development between the subregions and individual countries. Within sub-Saharan Africa, only East Africa and, to a lesser extent, the Indian Ocean island countries were able to achieve growth rates of more than 3 per cent during the period under consideration. This was due to a recovery in agriculture with growth in agricultural value-added averaging more than 5 per cent in East Africa and at least 3 per cent in the Indian Ocean island countries.

22. In Southern Africa, a combination of factors, ranging from drought to the continued political and economic destabilization activities, have stifled national and subregional efforts to initiate recovery: GDP grew by only 1.2 per cent in 1986 and by a mere 0.5 per cent in 1987. In Central Africa, performance was also generally weak; growth remained on average below 2 per cent. In West Africa, the continued instability of performance in the Sahel countries was a factor of real concern. After increasing by 5.1 per cent in 1986, the GDP growth rate for the Sahel fell sharply to only 1.7 per cent in 1987. In non-Sahelian West Africa, negative growth was recorded in both 1986 and 1987, with GDP falling by 3.5 per cent and 1.0 per cent, respectively.

### Overall performance of the industrial sector

23. Growth in the manufacturing sector has also been rather weak. In 1986, manufacturing value-added (MVA) in the region grew by only 4 per cent. According to UNIDO estimates and forecasts, the region's manufacturing value-added (MVA) was expected to grow by only 3.9 and 4.6 per cent in 1987 and 1988, respectively. Similar to the GDP data, these figures obscure the disparities between countries and subregions. For example, five North African countries account for about 44 per cent of Africa's total manufacturing output, and nine other countries account for 42 per cent, thus leaving the remaining 34 countries a share of only 14 per cent. The entire region accounts for only about 1 per cent of global manufacturing output, as compared to the minimum target of 2 per cent by the year 2000 derived from the Lima Declaration and Plan of Action, and a mid-term target of 1.4 per cent by the year 1990. Sub-Saharan Africa accounts for a mere 0.3 per cent of global manufacturing exports.

24. The inadequacy of foreign exchange has seriously affected the manufacturing sector, both in terms of new investment and the utilization of existing capacities. The total net flow of foreign finance to the region in terms of direct investment in industry has decreased significantly. This has also led to shortages in imported spare parts and other essential inputs to industry. The continued drought and famine, with a protraction of the emergency situation in most African countries, have led to an almost institutionalized dilemma between relief measures and long-term developmental activities such as support to the industrial sector. Competition of another kind also arises in the absence of long-term plans based on complementarity. Industry and agriculture compete for investments or external assistance, and the lack of a clearly established linkage between agriculture and other sectors, notably industry, in the development programmes of many African countries has posed serious constraints on recovery and development efforts.

25. In connection with the above, it is to be noted that during the 1980s the average annual growth of Africa's agricultural value-added was only 0.9 per cent, as compared to an average annual population growth rate of 3 per cent. This indicates that the growth of the agro-industrial sector is, in general, lagging behind population growth. Since agriculture is both the principal activity of over 70 per cent of the population in most African countries and the source of over 50 per cent of export revenues (except for mineral and oil exporters), agricultural stagnation has meant not only inadequate supplies for processing industries and a shortage of foreign exchange earnings needed for imported inputs, but also slow growth of domestic consumer demand.

26. Industrial policy reform measures instituted by African countries during the 1980s have varied widely. In most cases, they appear to have been largely prompted by changes in the external economic environment. The key elements of such policy and strategy adjustments relate to: improvement in the inflow of foreign capital; increased efficiency and competitiveness of local industry, especially parastatals and Government-run industries; better selection of production technology and improved scale of production; and development of industrial human resources, particular industrial entrepreneurs and managers and technical skills. However, the basic vulnerability of the region's industry to those changes has been accentuated by the shallow industrial base in most countries which are still in the initial stages of industrialization. Furthermore, many of the State-owned import-substitution industries, which have been isolated from the domestic resource base, continue to enjoy a safety net of subsidies, protective tariffs and quotas, thus virtually eliminating internal competition. As a consequence, indigenous private industries have encountered increasing financial constraints, thus inhibiting private initiatives by local industrial entrepreneurs.

27. The problems encountered in the development of the industrial sector have been compounded by more than just shortages of factor inputs or economic crises. A major constraint has been the lack of more familiarity on the part of policy-makers, planners, entrepreneurs and other actors with the inputs, processes, conditions required to initiate a programme such as that implied in the Lagos Plan of Action, Final Act of Lagos and the IDDA programme. In the case of industrialization programmes, there appears to be a lack of awareness of the conditions, processes and resources involved in mounting an industrialization programme, especially one that calls for effective intra-African co-operation and integration. There is, however, a discernable determined effort in this direction with the emergence, during the 1980s, of

such subregion intergovernmental organizations as the West African Economic Community (CEAO), the Economic Community of Central African States (ECCAS), the Economic Community of West African States (ECOWAS), the Preferential Trade Area for Eastern and Southern African States (PTA), the Southern African Development Co-ordination Conference (SADCC) and the Central African Customs and Economic Union (UDEAC).

28. This lack of understanding on the part of planners and policy-makers of the conditions, processes and resources involved in launching a successful industrialization programme is most visible in the inadequacy of industrial policies, planning and institutional infrastructure, limited financial resources, underutilization of installed industrial capacities, inadequate industrial skills, low technological negotiating capabilities and inadequate industries and technological information. These are further compounded by constraints at the subregional and global levels.

Inadequate industrial policies, planning and  
institutional infrastructure

29. Although important policy adjustments are being carried out in a number of African countries, the industrialization strategies and policies in most of them continue to be geared towards the promotion of import substitution and the manufacture of consumer goods. Manufacturing activities have therefore tended to concentrate on assembly operations based on imported raw materials and components, with little contribution to the upgrading of local natural resources and technological capabilities. These policies have therefore merely prolonged the external dependence of the region and made it even more vulnerable to external economic shocks.

30. What is most lacking in several African countries is a well-articulated and coherent industrial plan that: (a) integrates manpower and technological requirements; (b) ensures the availability of financial resources within a well-defined time-frame; and (c) is in subregional and regional harmony with the industrial development plans of neighbouring countries. The absence of such a plan has rendered the industrial and economic development policies and strategies in most African countries susceptible to political and economic changes.

31. Most African countries also lack an industrial institutional infrastructure that provides an appropriate framework for involving the entire population, particularly technical experts, in all their industrial development endeavours. Some countries have yet to establish a ministry or directorate responsible for industrial development. Others have institutional machinery that has been set up more for administrative rather than industrial development purposes. The absence of efficient technological training institutions as well as industrial consultancy organizations is very noticeable.

Limited financial resources

32. The major constraint on the industrialization of African countries is the limitation, at all levels, of resources. In the IDDA programme (ID/287), it has been estimated that new investment of the order of \$140 billion is required for the establishment of selected priority projects. This figure does not include the resources needed to rehabilitate existing plants or to

fund technical assistance in such essential areas as the development of industrial human resources and technological capabilities and other factor inputs. Of the \$140 billion it is expected that about 60 per cent of those resources will have to be mobilized from external sources.

33. For various reasons, however, domestic resources in Africa have fallen far short of expectations. The political will to industrialize has yet to be matched by concerted measures to mobilize local and international financial resources for the industrial sector. The meagre resources available to most African countries originally meant for development programmes such as IDDA have had to be diverted to emergency measures for economic survival.

34. Furthermore, there has been a general decline in the flow of investment and technical assistance resources to the industrial sector in Africa. Unfortunately, all indications point to a continuation of this trend, unless urgent and concerted action is taken immediately. Not only is total Official Development Assistance (ODA) stagnating, but its terms and conditions have also deteriorated in recent years. In particular, the flow of ODA to the industrial sector has been declining.

35. The inadequacy of financial resources for industrial development has been accentuated by the structural adjustment programmes promoted by the World Bank and the International Monetary Fund (IMF) which, in several countries, have also provided the framework for donor intervention. As a result of the above, the flow of external financial sources, both bilateral and multilateral, have increasingly been limited to those countries that have implemented the above structural adjustment programmes. In most of those programmes, however, the industrial sector has not been accorded the priority it deserves, despite its role in reducing the economic problems facing the African countries. The flow of financial resources to the industrial sector has therefore not been commensurate with the sector's importance.

36. These structural adjustment programmes also call for the disengagement of the state and the public sector from direct investments in industrial activities which they propose should be undertaken by the private sector. Investment capital for the industrial projects has therefore been an area that donors of aid to Africa insist or believe should be reserved for private initiative. At the same time, the flow of private capital to Africa has been declining steadily over the years as a result of combination of various factors, such as the debt crisis, reduced credit rating, poor investment climate, and scarcity of investment capital.

37. Bearing in mind that the state is the biggest industrial investor in the African countries in the absence of indigenous entrepreneurs, the structural adjustment programmes are imposing a de facto moratorium on the creation of large industrial units, especially subregional projects. And yet private investors, local and expatriate, are not forthcoming to invest in core industrial projects. Drastic restrictions on public investment imposed by these programmes is not only a break in the creation of industries, but also a serious obstacle to the rehabilitation and restructuring of existing industries.

### Underutilization of installed industrial capacities

38. An acute problem facing the manufacturing sector in many African countries is the great number of ailing industries, the low level of performance in others and the gross underutilization of installed capacities. In some plants, capacity utilization is as low as 30 per cent.

### Inadequate industrial skills

39. The most important factor input to industrialization in the African region is industrial skills. The achievement of the strategy for self-reliant and self-sustaining industrial development depends, to a large extent, on the development of the requisite local industrial capabilities. This, of course, is contingent upon the pattern of industrial production which determines the number and type of industrial skills required. Despite the efforts already being deployed by African countries, the industrial human resource gap is still appreciable. This deficiency is very often related to the inadequacy of existing educational policies and programmes, which are not equipped to cope qualitatively and quantitatively with the skills required for the entire spectrum of industrial activities, especially those related to the development of core industries.

### Low technological negotiating capabilities

40. Despite their dependence on foreign technologies for industrial and economic development, most African countries lack the machinery, institutions and capabilities for the selection, evaluation and acquisition of industrial technology. Their negotiating position is generally weakened by a lack of sufficient and precise information on various aspects of technology transfer, such as sources of available and alternative technologies; locally available technologies; level of research and development of those technologies; comparable information on financial, legal and technical conditions of transfer of technology agreements; information on foreign companies and donors of technology; and information on recent developments in such fields as international licensing, patents and trade-mark laws, and compulsory licensing. This has, in most instances, resulted in excessive payments, restrictive and tie-in clauses, and unfavourable grant-back provisions. These problems are also directly related to the lack of well-defined technological policies and institutional machinery resulting in inadequate regulation of the flow of technology.

### Inadequate industrial and technological information

41. Most African countries lack industrial and technological information, data and statistics, and information on alternative sources of technology, without which it is impossible to plan and forecast the development of relevant sectoral and national targets. They also lack capabilities for a continuing analysis of market and technological trends; identification of new opportunities stemming from new technologies; and assessments of the short- and long-term industrial and economic trends of the country and its changing needs.



### Constraints at the subregional level

42. While laudable efforts have been made at the subregional level, including the establishment of subregional organizations whose objectives include the promotion of industrial co-operation and integration, adequate measures still have to be adopted so as to put into operation existing co-operation agreements and programmes. Given the fact that subregional organizations cannot implement and operate industrial enterprises, the absence of mechanisms, including an adequate *modus operandi* for co-ordinating the activities of the participating entities (private or public or both), has been a constraint on the implementation of subregional projects. With a few exceptions, the role of subregional and regional organizations in the development and promotion of subregional/regional projects has not been clearly spelt out.

43. One of the most serious constraints on subregional co-operation, especially in the development of subregional projects, is the limitation of financial resources. It is much more difficult to secure financial resources for subregional projects than for national projects. Subregional and national organizations entrusted with the task of carrying out studies for joint or multinational projects do not always have the necessary budgetary allocations for such activities. These are activities that do not often receive the financial and technical support of international organizations, while intergovernmental organizations responsible for both national and subregional industrial development do not dispose of the resources to carry out these tasks.

44. Both bilateral and multilateral export credits to industry have also declined, as have direct investments in industry. The total net flow of foreign finance to industry has therefore shown a significant decrease.

### External constraints

45. The 1980s have been a period of uncertainty, instability and difficult adjustment for the world economy. African countries have been especially vulnerable to the multiple external shocks that motivated the proclamation of the Decade: falling commodity prices and the consequent worsening of the terms of trade for their primary products; uncertainties in respect of the price of oil; the recession in the developed countries followed by sluggish growth and increasing protectionist measures; the volatility in exchange rates and in the international financial market; and increases in real interest rates that have invalidated the assumptions under which large external debts had been contracted in earlier years. It is particularly disquieting to observe that the external debt service burden on the region has reached insurmountable levels in several African countries and, worse still, the international flow of credit and capital to the region has not shown any significant increase.

46. In connection with the above, it should be noted that the major reason for the region's heavy debt burden is the increasing dependence of Africa on imported industrial goods and services, the major factor inputs to economic development. Thus, actions by the international community have inadequately supported the main objective of the industrial programmes in African countries which call for the development of core industries and related industrial and technological capabilities with a view to ensuring self-reliance in providing the factor inputs required for economic development.

47. The lack of proper co-ordination among the technical assistance programmes of international organizations and other multilateral and bilateral donors has also contributed to the confusion that is reflected in the poor performance of the industrial sector in the region. This is particularly relevant in respect of assistance to regional/subregional organizations. While Africa badly needs all the assistance it can get, such assistance needs to be properly co-ordinated in order to bring about maximum impact.

#### Conclusion

48. In the light of the above and despite the recent progress achieved in the industrial sector, overall performance during the 1980s has not been satisfactory. As pointed out earlier, the general economic crisis in the region and the unfavourable world economic conditions have combined to bring about a significant reduction in investment resources directed towards the industrial sector in Africa. In most cases, the share of investment in the manufacturing industry as a total percentage of investment has remained below 20 per cent. In addition to being inadequate, investment resources have mainly been concentrated on light industries with high import content, thereby constituting a major source of foreign exchange outflow. Only a small portion of those resources was invested in the all-important resource-based and engineering core industries.

49. Furthermore, employment opportunities in the industrial sector have not increased, the share of manufacturing employment in total employment being less than 20 per cent in most African countries. The poor performance of the agricultural sector also continues to have an adverse affect on the development of the industrial sector. Intra-African trade in manufacturing goods remained insignificant in 1985, amounting to only 3.9 per cent of total trade in manufacturing products in that year.

50. The fact that the typical African economy is still at an early stage of development means that certain 'structural' features come into play and condition the environment in which industry operates. Seen from a positive angle, the fact that these economies start from a small industrial base offers potential scope for industrialization, as does the rich natural resource endowment of many African countries. On the negative side, however, the small population and low levels of income in most African countries mean that existing domestic markets for consumer goods are limited - far too small to permit the attainment of maximum economies of scale in many branches of industry.

#### **IV. CRITICAL LINES OF ACTION TO ACCELERATE INDUSTRIALIZATION IN AFRICA**

51. Despite the efforts made by African countries and organizations as well as by the international community to industrialize Africa, the very complexity and dynamism of the industrial development process continually give rise to many new challenges. The international co-operation needed to support that process is equally complex. These two factors together make it essential for all actors involved to take regular stock of the measures being pursued and to reassess their impact. This has rekindled the desire of African leaders to step up their efforts to accelerate the pace of industrialization throughout

the region. The renewed commitment of African leaders to this course has been well manifested in their unreserved decision to proclaim a second Industrial Development Decade for Africa and an Africa Industrialization Day.

52. Successful attainment of the objectives of the second IDDA and the Africa Industrialization Day calls for a readjustment of the perceptions, strategies and policies for industrial development on the part of African political leaders, policy-makers and planners. A comprehensive industrialization programme has to be conceived as a crucial component in the development of internal engines of growth. Yet the 'design and construction' of internal engines of growth has been slowed down by the economic crisis affecting African Governments which has forced them to adopt relatively short-term policies and strategies to cope with that crisis. As a result, plans for the expansion of core industries, an essential step in the development of internal engines of growth, have had to be suspended or greatly reduced.

53. The successful industrialization of Africa would also be conditioned by acceptance by all African countries of the fundamental fact that industrial development must come from a conscious effort by Governments to: formulate appropriate policies; define industrial objectives and priorities; mobilize and deploy resources (both human and financial) in the desired directions, such as building up industrial infrastructure; create the necessary operating organizations; and provide the appropriate climate for investment and entrepreneurship.

54. Concomitantly, particular efforts must be directed towards developing and encouraging productive operational agents for development that can translate policies and strategies into action. More attention needs to be devoted to the complementarities between the public and private sectors as well as to the small-scale sector in generating employment and developing entrepreneurial capabilities in the industrial sector. In this regard, measures need to be taken to strengthen the links between small-scale industries and other sectors as well as to adopt policies and programmes which assist the small-scale entrepreneur to grow and enter into industry. In the ultimate analysis, without entrepreneurs and experienced managers, there can be no industry.

55. In addition, concerted measures must be taken to find a viable solution to the problem of low productivity, low capacity utilization and inadequate input-output ratios in existing industrial assets. It should be noted, however, that many countries have already embarked on rehabilitation programmes, although the poor performance of the industrial sector in Africa during the 1980s, especially in terms of low productivity, low utilization of capacity and inadequate returns on investment was symptomatic of certain underlying defects in the countries' economic and industrial structure. This question is also related to the need for productive, financial and social efficiency in the public sector, along with the need to develop an acceptable system to evaluate performance. Private investment in industry which witnessed a drop during the 1980s should be encouraged.

56. The report of the team of experts on the independent mid-term evaluation of IDDA (document CAMI.9/20/Add.1:ICE/1989/20/Add.1) advances a number of proposals for the formulation of a programme for the second IDDA. Those proposals as well as the priorities set by African Governments and organizations identify the following areas of emphasis:

- (a) Industrial policies and strategies;
- (b) Core and agro-related industries;
- (c) Industrial rehabilitation and maintenance;
- (d) Development of human resources;
- (e) Development and acquisition of technology;
- (f) Energy resources for industrial development;
- (g) Small- and medium-scale industries and entrepreneurial capabilities;
- (h) Mobilization of financial resources;
- (i) Intra-African industrial co-operation and integration;
- (j) Economic and technical co-operation among developing countries (ECDC/TCDC) in support of the programme for the Decade;
- (k) Technical advisory services;
- (l) Promotional activities.

Industrial policies, strategies, plans and  
institutional infrastructure

57. Faced with a variety of constraints and scarcity of resources compounded by domestic structural rigidities and rapidly shifting patterns of international economic relationships, industrialization strategies and policies need to be continuously reviewed and adjusted to prevailing economic needs and priorities at the national and subregional levels. In this regard, greater emphasis needs to be placed on a programme approach covering: restructuring and policy reforms; integrated planning of human resources, energy and technology; promotion of investment in key subsectors, and development of physical and institutional infrastructures.

58. The experience acquired by some African countries in elaborating national industrial master plans needs to be consolidated and duly enhanced for wider application in other African countries. This approach also needs to be extended to the subregional level where there is an increasing need for the preparation of subsectoral industrial master plans at the regional and subregional levels. In all these endeavours, particular attention needs to be paid to the current emphasis on greater participation by the private sector.

59. The above actions would depend, to a great extent, on the availability of industrial information, data and statistics necessary for monitoring the industrialization process at the national and subregional levels. Industrial research and studies activities also need to be expanded to include surveys, especially in priority core industrial subsectors and support areas, and a continuous analysis needs to be made of the implications of external economic forces on the development of those subsectors and areas.

60. The formulation of industrial strategies and policies thus requires that Governments continuously monitor external and internal developments and create a dynamic overall framework in which the industrial sector, subsector and micro-investment plans can be conceived and promoted as parts of an overall sustained development process. The strengthening of institutional capacities and development of skills would have long-lasting beneficial effects on the optimal utilization of scarce resources and, consequently, on the achievement of national economic objectives.

61. With regard to industrial institutional infrastructure, which, at present, is woefully inadequate in most African countries, it is necessary to intensify efforts, especially at the national level, to strengthen or

establish industrial and technological institutions in various fields. Such actions need to include: investment in physical infrastructure; integrated development of small-scale industries; development of national capabilities for quality control and standardization; industrial research technology; establishment of a technological information data base; and provision by Governments of a range of critical industrial services.

62. Here, as in many other priority areas, in order to secure a fuller understanding of the need for such institutions, measures should be taken to increase general awareness of the role of industry itself. This can be achieved by various promotional measures ranging from special workshops, the dissemination of print and visual media, to the organization of events related to Africa Industrialization Day.

#### Establishment of core and agro-related industries

63. In view of the overriding importance of core and agro-related industries to the economic development of the continent, industrial development programmes and activities in Africa will have to continue to place emphasis on the development of those industries. There will thus be a need to refine the present approaches by adopting an integrated programme approach based on specific priority agro-industrial subsectors and branches.

64. In such a programme approach, the industrial inputs required to solve a specific agricultural problem would be systematically identified. It would also demonstrate how an integrated approach can be used to identify a package of consistent technical assistance programmes that contribute to increased growth and improved productivity in specific problem areas. Furthermore, in the implementation of such programmes, industry and agriculture in Africa could be planned on a mutually supportive basis. This approach would yield relatively large and complex projects covering specific crops or agricultural products. The ultimate objective would be to ensure that all the industrial inputs needed to increase agricultural productivity are provided in a manner consistent with plans, local crops and agricultural conditions.

65. Within the framework of the above programme approach, the ongoing activities in support of agro-industrial development need to give particular attention to the following priority areas:

- (a) Promoting subregional or regional co-operation in the production of agro-chemical inputs such as fertilizers, pesticides and animal vaccines;
- (b) Improving and developing new designs of the most appropriate and economical agricultural implements and machinery, and promoting their manufacture on the basis of domestically available raw materials and production facilities;
- (c) Developing an effective domestic infrastructure for the repair and maintenance of agricultural machinery and equipment;
- (d) Promoting the local manufacture of low-cost irrigation equipment and giving due priority to the repair and maintenance of equipment already in operation;

- (e) Developing specific crop-storage, transport and handling problems where major post-harvest losses occur, and introducing improved technologies for food processing, preservation and storage, including packaging;
- (f) Supporting the manufacture, repair and maintenance of equipment in the fisheries sector, including assistance in developing and promoting economical designs, construction techniques and materials for the manufacture, repair and maintenance of fishing boats, as well as in establishing fish-processing, preservation and storage facilities;
- (g) Promoting the food-processing industry in Africa, including the rehabilitation and more efficient use of existing industrial capacity, the improvement of quality-control systems and the optimization of economic return through, for example, maximum use of by-products and residues;
- (h) Developing a dynamic programme for the local manufacture of spare parts for equipment in use in those African countries where the infrastructure and basic facilities exist.

66. The development of core and agro-related industries is closely linked to the preparation of sectoral surveys, industrial master plans and programmes, including the training of a nucleus of technical skills in the selected priority industrial branches. Thus, the readjustment of industrial policies, strategies and plans, the strengthening of institutional infrastructure, the development of human resources and technological capabilities and the mobilization of financial resources should be linked to the development of core industries.

#### Industrial rehabilitation and maintenance

67. One of the dominant preoccupations in the current debate on Africa's economic recovery is the question of underutilized productive capacities. This situation is particularly critical in the industrial sector, where it is common to observe extremely low capacity utilization over prolonged periods. Improved productivity and greater utilization of installed capacities would offer one of the most economical means of restoring economic growth in Africa, provided, of course, that the installed capacities in question are capable of rehabilitation.

68. The task of industrial rehabilitation and productivity improvement in Africa will have to be tackled step-wise at the sectoral or subsectoral level, as determined by national, subregional or regional priorities. Such an approach would involve: the identification of factories requiring rehabilitation; a careful assessment from the technical, economic, management, financial, marketing and legal point of view of the factories identified in order to determine their potential economic viability; preparation of a programme and schedule of inputs required for the rehabilitation of those factories; and mobilization of the necessary financing. The detailed work to be carried out would involve the following possible steps:

- (a) Diagnosis of industrial plants and enterprises, including assessment of the overall economic viability of the enterprise and identification of management, financial, technical, legal and marketing problems;
- (b) Actual rehabilitation of individual plants and equipment, including repair and maintenance of machinery and equipment, solution of technology-specific problems, improvement of management and technical skills, and diversification of products and markets;
- (c) Strengthening or developing national industrial consultancy and management capabilities and establishing national, subregional and regional consultancy networks with emphasis on diagnostic and trouble-shooting and extension services, especially to small-scale industries.

#### Development of human resources

69. The development of human resources is one of the key prerequisites for industrial development. This holds true not only for the development and rehabilitation of agro-related industries, but also for the effective formulation of industrial policies and strategies, as well as for the development and promotion of the small-scale industry sector. Consequently, training should be one of the major preoccupations of African countries and international organizations alike. Special priority, therefore, needs to be accorded to the elaboration and implementation of industrial manpower development plans and programmes, with priority given to the following priority activities:

- (a) Identifying manpower needs, including the identification, analysis and evaluation of training needs, programmes and facilities; and formulating industrial manpower development policies and plans, including measures for the involvement of local experts in project design, planning, preparation, implementation and monitoring etc.;
- (b) Developing comprehensive and fully integrated programmes directed towards the accelerated development of industrial manpower, technological capabilities, local entrepreneurial capacities and industrial trainers;
- (c) Strengthening and/or establishing multi-purpose training institutions, as well as specialized institutions or centres of excellence, to provide training in specific core industrial subsectors and branches;
- (d) Strengthening training links between universities and industry;
- (e) Establishing 'teaching companies', as well as facilities for the local production of textbooks, educational and training videos, kits and manuals;
- (f) Introducing special training programmes for industrial maintenance and rehabilitation, the integration of women in industrialization, and the development and promotion of small-scale industries, especially in rural areas;

- (g) Mobilizing financial resources for industrial training;
- (h) Promoting intra-African co-operation, TCDC and international co-operation in industrial training.

Development and acquisition of technology

70. The need to develop national systems for the development and acquisition of technology is apparent, as are the disadvantages of not having appropriate machinery for the selection and evaluation of industrial technology. National plans should therefore aim at developing the capabilities, machinery and institutional framework for both the development and acquisition of technologies. The associated information requirements should also be met. Work related to the development and acquisition of technology therefore needs to be intensified, focusing on the following priority areas:

- (a) The formulation of national technology policies, including their harmonization at the subregional level;
- (b) Strengthening and/or establishing national, subregional and regional technological institutes and centres of excellence, including technological, extension and field services;
- (c) Development of an appropriate technological information base in African countries, including the establishment of technological information nodes at the national, subregional and regional levels and their linkage to information centres outside Africa via the Industrial and Technological Information Bank (INTIB);
- (d) Strengthening/developing the capacity for selecting, acquiring and adapting industrial technology to economic and social conditions in Africa; developing and commercializing local technologies for practical industrial applications; and undertaking technical, economic, commercial and legal evaluations of industrial technology transfer agreements and contracts;
- (e) Training at the national, subregional and regional levels in the development, acquisition, adaptation and transfer of technology, including the evaluation and negotiation of technology contracts;
- (f) Promoting technological co-operation between African countries and the developed countries, as well as other developing countries.

Development of energy resources for industrial development

71. Given Africa's rich endowment in terms of both renewable and non-renewable forms of energy, every attempt needs to be made to build up the region's technological and industrial capacity to exploit those energy resources. The fact that the resources are not distributed equally across the region, makes intra-African co-operation in this regard essential. Furthermore, the growing demand for energy associated with industrial development underscores the need to ensure the effective management and conservation of energy resources. The various activities in the development and efficient utilization of energy resources should thus be consolidated, with special emphasis on the following areas and activities:



- (a) Strengthening African institutions working in the field of energy, including providing them with demonstration equipment and training;
- (b) Promoting intra-African co-operation in the field of energy through, for example, the harmonization of energy policies, programmes and power supply systems at the subregional and regional levels;
- (c) Establishing small-scale hydroelectric power plants;
- (d) Integrating new and renewable energy technologies in industrial programmes, especially at the rural level;
- (e) Developing local capabilities for the development and acquisition of technologies and the manufacture of energy components and appliances;
- (f) Introducing energy management and conservation programmes, including education and training, as well as methodologies for energy audits and assessment;
- (g) Promoting the manufacture of energy equipment in developing countries, including guidance in establishing manufacturing plants, facilitating the transfer of the necessary technology and encouraging joint venture relationships;
- (h) Mobilizing financial resources for energy projects.

Development and promotion of small- and medium-scale industries and entrepreneurial capabilities

72. The importance of small- and medium-scale industries has been extensively examined in analyses of the industrialization process. Indeed, the small- and medium-scale industrial sector is of particular significance to Africa given the pivotal role it plays in fostering entrepreneurship and laying the basis for larger-scale industrial endeavours. Small and medium-scale industries also contribute to forward and backward integration, not only between the various industrial subsectors but also between industry and other sectors of the economy, primarily agriculture. Furthermore, the largely self-financing nature of small-scale entrepreneurs can be a potent force in mobilizing domestic savings. On these grounds alone, small- and medium-scale industries warrant special consideration in any development programme.

73. The problems faced by small- and medium-scale industries tend to be fairly universal. These include marketing difficulties, limited access to credit and the high costs of raw materials and spare parts. African countries often lack the support organizations that provide extension services to small-scale entrepreneurs. Appropriate policies are also necessary and much work still remains to be done in this area in order to attain the right combination of financial and legislative incentives for potential small- and medium-scale entrepreneurs.

74. In the development and promotion of small- and medium-scale industries and entrepreneurial capabilities, particular attention needs to be given to:

- (a) Adjusting and/or formulating fiscal and financial policies and incentives, as well as establishing special financial institutions specifically aimed at promoting the development of small- and medium-scale industries and entrepreneurial capabilities;
- (b) Restructuring and reorienting development centres that provide direct assistance to small-scale industrial entrepreneurs;
- (c) Encouraging chambers of commerce and business associations so that they can assume an active role in the promotion of small-scale industries. This entails the development of industrial consultancy capabilities and promoting the exchange of experience between chambers of commerce in different countries;
- (d) Promoting enterprise-to-enterprise co-operation, either on a North-South or South-South basis;
- (e) Promoting the development of industrial consultancy capabilities and the exchange of information with their counterparts in other countries;
- (f) Upgrading the technical capability of staff attached to development and extension services centres in order to secure the confidence of small-scale entrepreneurs in their services.

#### Mobilization of financial resources

75. The mobilization of resources for industrial development is a crucial task involving not only the Governments concerned but also the international community. Concerted action needs to be taken to increase the flow of finance to the industrial sector projects from both local and external resources. This will require the re-inforcement of existing mechanisms and the adoption of new approaches. In this regard, the share of UNDP national and regional funds should be increased and the technical assistance components of loans and/or lines of credit extended to African countries by the World Bank and other national, subregional and international financial institutions should be used to finance industrial projects.

76. A prerequisite for the successful mobilization of financial resources is the identification and preparation of sound industrial investment projects. In this regard, there is a need to accord greater emphasis to the complementarity of inputs to investment project identification, support in project preparation, pre-investment studies and promotion as well as the capacity to assist private promoters in putting together project financing packages.

77. African Governments need to introduce supportive macro-economic policies in order to increase domestic industrial financing and to improve the ability of their public and private financial institutions to secure both internal and external financial resources. At the international level, there is a need for greater co-ordination between sector-specific actions by specialized institutions as well as for greater harmonization of activities of international organizations with those of major multilateral financial, private and public institutions concerned with industrial financing.

78. There is also a need for greater international co-operation in the organization of industrial investment fora and solidarity meetings which hitherto have attracted a large number of African and non-African participants from the private and public sectors and financial institutions. Furthermore, enterprises outside Africa also need to be encouraged to make more direct investments and enter into mutually beneficial joint venture agreements with African countries. In this regard, African countries need to take greater advantage of the UNIDO Investment Promotion Services established in a number of countries.<sup>1/</sup>

79. The above could be facilitated by such instruments as the African Project Development Facility (APDF), which has been launched by UNDP, the International Finance Corporation (IFC) and the African Development Bank (ADB). The overall objective of APDF is to accelerate the development of productive enterprises sponsored by private African entrepreneurs. It assists African entrepreneurs in identifying and preparing investment projects for promotion among potential partners abroad.

80. Another promotional instrument is the International Industrial Development Foundation (IIDF), a non-profit corporation established by UNIDO in the United States, under the appropriate federal statutory provisions. The central purpose of the Foundation is to promote and encourage economic development in the developing countries. The corporation can receive donations from corporate and private donors to support its goals. IIDF will also be able to finance and implement projects in co-operation with other foundations in Canada and the United States. Most importantly, it will constitute a primary channel of communication between UNIDO and major donors in the United States interested in funding projects in developing countries. The immediate focus of the Foundation has been on securing early donations for projects identified in Africa.

81. The mobilization of financial resources will be facilitated by the adoption of a 'programme approach' in specific priority areas such as plant rehabilitation and maintenance, human resource development, the manufacture of agricultural machinery and implements, involving the elaboration of medium-term (five-year) programmes for promotion among multi-purpose donors, as well as among financial institutions and development corporations such as the African Development Bank, subregional African development banks, Islamic development banks, Arab financial institutions and development foundations. Furthermore, mechanisms for enterprise-enterprise co-operation and the involvement of non-governmental organizations need to be intensified and utilized in the elaboration of the above-mentioned programme themes.

#### Intra-African industrial co-operation and integration

82. There is an urgent need to translate political decisions on regional/subregional industrial co-operation into concrete measures by providing the necessary financial and human resources to subregional organizations so that they can become real agents of subregional industrial integration. In this

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<sup>1/</sup> Austria, Federal Republic of Germany, France, Italy, Japan, Republic of Korea, Poland, Switzerland and United States of America.

regard, there is a need to accord special emphasis to the following:

- (a) Periodic assessment and adjustment of subregional industrial promotion programmes, including the organization of follow-up subregional meetings and preparation of subregional subsectoral surveys and master plans and industrial programmes, including greater consultations among member States on specific projects;
- (b) Preparing pre-investment studies, including investment profiles of selected projects for promotion among potential investors and financing institutions;
- (c) Identifying specific areas and modes of co-operation between countries as well as between producers and relevant institutions;
- (d) Establishing subregional co-ordinating committees to review and update subregional industrial programmes, monitor their implementation and co-ordinate the activities of subsectoral technical committees; and
- (e) Strengthening existing and/or establishment of new African multinational production enterprises in priority core industrial subsectors;
- (f) Strengthening the relevant departments of the 'lead' subregional organizations so as to monitor effectively the implementation of the subregional programme.

Economic and technical co-operation among developing countries  
(ECDC/TCDC)

83. Among the priority activities being undertaken within the framework of ECDC/TCDC that should be intensified is the organization of solidarity and round-table ministerial meetings devoted to industrial development, as well as the relevant follow-up to projects identified during those meetings. The activities related to the following:

- (a) Promotion of enterprise-to-enterprise co-operation in a number of areas, including production, technology and industrial training, information, investment and research and development;
- (b) Establishment of multinational production enterprises;
- (c) Identification and promotion of joint investment projects, including exchange of natural resources, finished products, technology and services;
- (d) Promotion of complementarity in the field of consulting and engineering services;
- (e) Strengthening of industrial and technological capabilities through national and regional institutions, in-plant group training programmes and establishment of new technological and training centres and networks, as appropriate;

- (f) Creation and strengthening of mechanisms to facilitate the exchange of experience and information on industrial and technological developments, including the use of the Industrial and Technological Information Bank (INTIB) and the Technological Information Exchange System (TIES);
- (g) Elaboration of 'guidelines', 'model agreements', 'standard contracts' and 'industrial inventories' to facilitate promotion of industrial co-operation among developing countries;
- (h) Establishment of programmes of co-operation among regional development banks and financial institutions.

#### Promotion of Africa's industrialization

84. With regard to the promotion (publicity) of African industry, it will be recalled that one of the main objectives of the first IDDA was to promote greater awareness among African countries and organizations of the role of industry in economic development. While some progress has been achieved in this area, a major task remains: mobilizing support for and commitment to industry on the part of African leaders (be they in political or governmental bodies, the business community, educational institutions or other target groups). Knowledge of African industrialization is still lacking both within Africa and without. It is therefore essential to intensify promotional action so as to involve specific sectors and target groups of the African population in the industrialization process. The decision of the OAU Heads of State and Government to proclaim 20 November of each year as the Africa Industrialization Day should contribute to promoting greater awareness of the role of industrialization in Africa.

#### V. CONCLUSION

85. In recognition of the pivotal role that industry plays in the economic development of the African countries, industrialization was accorded the second highest priority in the Lagos Plan of Action, first priority being accorded to self-sufficiency in food production. Its critical importance within the total range of activities aimed at freeing Africa from underdevelopment and economic dependence has been repeatedly emphasized. Indeed, a permanent solution to the external debt crises in Africa depends to a great extent on the local production of industrial goods and services whose importation currently account for most of Africa's external debt and foreign exchange expenditures.

86. Although food and agricultural production has been accorded highest priority in various political declarations on the economic situation in Africa by the African countries and the international community, particular emphasis has also been placed on other sectors that support agricultural and food production, especially the industrial sector. Structural linkages between the agricultural and industrial sectors has emerged as an area of priority attention and action.

87. By proclaiming IDDA, the African Governments reaffirmed their decision to accord, in their development plans, a major role to industrialization with a view to enhancing its impact on meeting the basic needs of the population,

ensuring the integration of the economy and the modernization of society, as well as achieving a greater share for the region in world industrial production. They are also fully aware that such a proclamation confers certain obligations on those who work for it. They have thus undertaken a commitment to take all the necessary steps and to make an appropriate contribution to the efforts required to ensure the success of the Decade.

88. As indicated earlier in this paper, progress in the industrialization of Africa has not been satisfactory and the objectives of IDDA are yet to be fully attained. This has led to the decision by African decision-makers to proclaim a second IDDA. The case for a second IDDA rests principally with the experience of African countries during the 1980s. In brief, during the current decade, African countries have not witnessed any significant progress towards the establishment of the new international economic order advocated by the United Nations General Assembly. In fact, the status quo persists and the effects of unfulfilled promises of global development strategies continue to aggravate the economic situation in Africa.

89. The region continues to depend extensively on exports of primary commodities, at decreasing unit prices, to broadly the same markets. It depends even more on the same markets for imports of factor inputs at decreasing unit prices. Despite the adoption of structural adjustment programmes by many African countries, only minimal achievements have been made in respect of compensatory financial arrangements, aid, loans, and inflows of foreign direct investment at bearable costs, all of which are essential to providing the means for growth and development that the countries so badly need. There therefore appears to be no viable solution in sight for the successful management of the aggravating debt crisis, unless African countries undertake rapid industrialization that will eventually eliminate the debt accumulation process and accelerate economic growth.

90. In addition to the above familiar constraints, a new situation has emerged during the 1980s which bears serious consequences for Africa. Significant changes are taking place in global economic and political relations with the emergence of economic blocs and 'fortresses' which are expected to dictate the future direction of the world economy. Plans for a more economic integrated Europe by 1992 and increasing West-West and East-West economic relations are clear indications of the above trend. While these developments might offer some trickle-down benefits to Africa, the consequences they bear for the continent, which is still industrially and economically underdeveloped, will be far-reaching.

91. The above reconfirms beyond any doubt the grounds on which African leaders drew up and accepted - and still accept - the Lagos Plan of Action, the Final Act of Lagos and IDDA. The experiences of the 1980s and the scenarios projected for the world economy at the end of the first decade of the next century (2010), point to the urgent need for each African country to devise and implement a sound programme for the second IDDA which will contribute to the development and economic growth of the region. The proclamation of an Africa Industrialization Day will complement their steps to promote further the industrialization of the continent.

92. It is expected that with the renewed commitment of African leaders to take decisive steps, with the support of the international community, towards the accelerated industrialization of the region, the successful formulation

and implementation of programmes for the second IDDA and the Africa Industrialization Day will help bring about structural changes in national and regional economies consistent with the declared strategy of self-reliant and self-sustained development. It would also help expand savings through the local development of factor inputs, enlarge domestic and multinational markets, encourage investment by domestic and foreign entrepreneurs, and make long-term debt management easier. The new economic development path to be brought about through accelerated industrialization will enable African countries to cope, individually and collectively, with the far-reaching changes in the world economy during the next century and lead to the eventual elimination of debt and economic crises. It will also help to raise the level of Africa's participation in and contribution to global economic development and growth.

93. There is thus a need for the entire international community to reaffirm its solidarity with the African countries in their industrial development efforts, especially in the implementation of the IDDA programme. Such solidarity must go beyond mere declarations. It would therefore be desirable for the international community not only to agree on a number of measures to reinforce its industrial co-operation with the African countries, but also to provide assistance to African countries and intergovernmental organizations in carrying out various activities related to the continuous formulation and implementation of their industrialization programmes. The analysis in this paper confirms fully that Africa continues to be the region most deserving of additional urgent attention at this critical juncture in its development.