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**FRAMEWORK AND GUIDELINES
FOR ACTION AT THE NATIONAL AND SUBREGIONAL LEVELS FOR THE
PREPARATION OF THE PROGRAMME FOR THE
SECOND INDUSTRIAL DEVELOPMENT DECADE FOR AFRICA
(1991-2000)**

Prepared jointly by
the Secretariats of OAU, ECA and UNIDO

*This document has not been edited.

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CONTENTS

<u>Chapter</u>	<u>Paragraph</u>	<u>Page</u>
I. INTRODUCTION	1 - 8	1
II. CONCEPT AND BASIC PRINCIPLES OF THE SECOND IDDA	9 - 10	2
III. FRAMEWORK FOR THE PREPARATION OF NATIONAL AND SUBREGIONAL PROGRAMMES FOR THE SECOND IDDA	11 - 62	3
IV. GUIDELINES FOR GOVERNMENTS	63 - 86	14
V. GUIDELINES FOR SUBREGIONAL PROGRAMMES	87 - 105	19
VI. PROMOTIONAL PROGRAMMES	106 - 112	25
VII. CO-ORDINATION AND MONITORING	113 - 120	26

ANNEXES

I. An integrated "top-down/bottom-up" approach to rehabilitation	29
II. The programme approach	33
III. Propositions pour un programme de promotion des investissements industriels dans le cadre de la seconde Decennie du développement industriel de l'Afrique	35
IV. UNIDO strategic management concept to support the industrial development in Africa	37
V. Direct support to industry under trust fund arrangements: the seed money approach	39
VI. Criteria for selecting industrial core projects at the national and subregional levels	41

I. INTRODUCTION

1. In resolution 2 (IX) on the proclamation and formulation of a programme for a second Industrial Development Decade for Africa (IDDA), adopted by the ninth meeting of the Conference of African Ministers of Industry, held at Harare, Zimbabwe, 29 May to 1 June 1989, the Secretariats of OAU, ECA and UNIDO were requested to prepare, in consultation with the working group of governmental experts, a framework to assist Member States in the elaboration of their national and subregional programmes for the second IDDA. In addition, the United Nations General Assembly, at its 44th Session by its Resolution 44/237 proclaimed 1991-2000 as the second IDDA. The third General Conference of UNIDO also adopted Resolution GC.3/Res.10 on the second IDDA. This framework has been prepared by the three secretariats in response to the above resolutions.

2. The objective of the framework is to assist African countries and intergovernmental organizations in the formulation of their respective programmes for a second IDDA. Taking into account the African economic situation and future prospects, the experience gained in the first IDDA, the views expressed by the African Ministers of Industry at the ninth meeting of the Conference at Harare in June 1989, and the evaluation of the IDDA, the framework identifies certain important components, issues, modalities and guidelines that are designed to facilitate the preparation of national and subregional programmes for a second IDDA. In so doing, it is recognized that a number of programmes and plans of action have been adopted, many of which have failed to make an appreciable impact on the socio-economic situation in the region.

3. The major departure in the approach to the formulation of a programme for the second IDDA is the responsibility placed on African Governments as the initiators and formulators of the programme. The evaluation report on the first IDDA brought out a number of shortcomings in the formulation and implementation modalities of the Decade programme, which have been taken into account in the preparation of the framework.

4. In addition, the framework has taken cognizance of the critical role of industry in overall economic transformation: in particular, its provision of the engines of growth and of the elements that facilitate integration. The success of recovery and development programmes in other sectors will very much depend on the performance of the industrial sector, which should thus constitute an important focus of economic activities in a given economy.

5. The preparation of national and subregional programmes for the second IDDA should look beyond the immediate economic horizons of Africa. It should be situated within the overall context of Africa's perception of current and future world developments, the likely scenarios of the 21st century and their possible implications for Africa.

6. The advances in scientific and technological fields, the rapid changes in Central and Eastern Europe and the growing tendencies towards regionalism and the building of trading blocks should re-orient Africa's approach to economic co-operation and integration, and bring about a serious rethinking of an African economic community.

7. The framework emphasizes the issues of appropriate policies and strategies that promote economic development, effective motivation and full participation of all sectors of African society, with the support of an adequate institutional infrastructure. It also stresses the achievement of national and collective self-reliance in the face of the current socio-economic situation in Africa and prospects for the future.

8. The framework and guidelines for the preparation of programmes for the second IDDA, contained in this document, cover the following elements:

- (a) Concepts and basic principles of the second IDDA;
- (b) Framework for the preparation of national and subregional programmes for the second IDDA;
- (c) Guidelines for Governments;
- (d) Guidelines for subregional programmes;
- (e) Promotional programmes;
- (f) Co-ordination and monitoring.

II. CONCEPTS AND BASIC PRINCIPLES OF THE SECOND IDDA

9. The second IDDA is not a totally new approach to African industrial development. Like that of the first IDDA, the fundamental goal of the second IDDA is to achieve self-reliance and self-sustainment in the African continent. This calls mainly for an increasing use of local factor inputs, institutionalising and intensifying integration and co-operation schemes among African countries with the full involvement of indigenous entrepreneurs, both public and private, and for the building up of domestic production structures capable of meeting changing local demand. More specifically, the principal objectives of the IDDA are:

- (a) To use industrialization as a means of attaining self-reliance and self-sustainment;
- (b) To reduce traditional dependence on forces and factors outside the continent;
- (c) To promote internal engines of growth;
- (d) To increase the use of domestic factor inputs;
- (e) To promote the establishment in Africa of core and strategic industries;
- (f) To develop critical national capabilities, human, institutional and infrastructural, for project design, project execution, negotiating skills, mobilization of financial resources, support services, entrepreneurship and business management;
- (g) To promote regional and subregional co-operation as a practical means of enlarging markets, establishing multinational core projects and strengthening the interdependent physical and human infrastructure.

10. These basic aims continue to underpin the strategy of the second IDDA. However, keeping in mind the crisis faced by Africa during the eighties, the immediate objectives of the second IDDA should be expanded to cover some concrete and pragmatic areas of action, including:

- (a) To promote the consolidation of existing investments, through regeneration of ailing industries and revitalization of the public enterprise sector;
- (b) To expand existing assets and promote new investments, particularly in core industries, keeping in mind national endowments, markets, capabilities and viability based on sound commercial and socio-economic considerations;
- (c) To promote the creation and upgrading of all types of human skills required for integrated industrial development;
- (d) To develop an appropriate supporting physical infrastructure;
- (e) To improve the quality and range of the institutional infrastructure;
- (f) To pay special attention to the needs of the least developed countries (LDCs) in the region;
- (g) To strengthen and extend programmes of regional and subregional co-operation.

III FRAMEWORK FOR THE PREPARATION OF NATIONAL AND SUBREGIONAL PROGRAMMES FOR THE SECOND IDDA

11. The first task in the preparation of national and subregional programmes for the second IDDA is the formulation of policies and strategies for industrial development within the context of the overall national development plans. This should be followed by a projection of the scope, range and content of industrial investment programmes, projects and supporting activities for the Decade. The programme which will emerge in each country and subregion will be based on the level of development, availability of natural resources and capabilities, economic priorities and socio-political aspirations in that country or subregion. National and subregional programmes of the second IDDA should be specific and selective, concentrating on a limited number of concrete programmes and projects in order to be effective. Each country and subregion should identify thrust areas and specific areas with definite and defined goals. Each priority subprogramme and project selected as part of national and subregional programmes should have its principal promotor designated.

12. The programmes suggested below are indicative in nature and represents a shelf of possibilities. The programmes, projects and supporting activities fall into four categories:

- A. Programmes of consolidation;
- B. Programmes of industrial expansion and new investments;
- C. Support programmes
- D. Special programmes for LDCs.

A. Programmes of consolidation

A.1. Rehabilitation of existing industrial enterprises

13. A recurring theme in all surveys of African industrialization is the poor performance of industrial enterprises already installed in Africa. The net consequence is large-scale loss of production, heavy costs of manufacture, shortage of end-products, continued dependence on imports and heavy financial losses to enterprises and to the nation. The first task clearly is to make existing investments produce and pay for themselves.

14. The national/subregional programmes of the second IDDA should include a diagnostic survey of existing industries, proposals for remedial action and, where appropriate, a plan for diversification to produce other related products. The survey should also use specific criteria as a basis for identifying industries to be closed down, with their machinery and equipment being shifted whenever possible to industries where they can be gainfully used.

15. In the field of industrial rehabilitation, the integrated and multi-disciplinary approach developed by UNIDO is proposed as it goes far beyond diagnoses at the plant level. It involves studies:

- (i) At the macro-industrial policy level, in order to remove obstacles to the viable development of the industrial sector as a whole;
- (ii) At the sub-sectoral level covering a number of enterprises engaged in similar and inter-related lines of production;
- (iii) At the level of a specific enterprise to cope with critical bottlenecks in production plants.

Further details regarding this approach to industrial rehabilitation are given in Annex I.

A.2. A national programme of preventive maintenance and domestic production of spare parts

16. One of the main reasons for the under-utilization of the capacity in private and public enterprises is the absence of and inadequate implementation of proper preventive maintenance. Continuous dependence on imported spare parts and replacement equipment also hampers regular maintenance. Plant level evaluation has to be carried out with respect to maintenance schedules, replacement equipment and spare part requirements. Budget provision has to be made annually for the purchase of spare parts and replacement equipment, both domestic and imported. Simultaneously, ancillary industries should be promoted at the national level for the manufacture of spare parts and a phased programme of indigenization of imported spares has to be worked out. Regional centres could be involved in design modifications for production equipment so as to make plant maintenance and equipment replacement simpler and more cost-effective.

A.3. Revitalizing the public enterprise sector

17. In the present industrial sector in most African countries, public enterprises play an important role. The functions of some public industrial enterprises cannot be easily or rapidly replaced by those of the private sector in the context of the industrial scenario in Africa. For such enterprises, there is a need to undertake a courageous and objective diagnosis of their problems. After the diagnostic studies, corrective actions should be taken with respect to proper management, organization, autonomy, incentives and personnel policy. There should be periodic evaluations of public sector enterprises in terms of the following parameters:

- Productive efficiency;
- Financial efficiency; and
- Social efficiency.

B. Programmes of expansion and new investments

B.1. Core industries

These include the following:

- Metallurgical industries, which provide inputs for the engineering industry;
- Engineering industries, which cover foundries, forges and machine shops for the manufacture of equipment, components and spare parts;
- Chemical industries, which cover fertilizers, pesticides petrochemicals and pharmaceuticals;
- Building materials industries, which cover the development and production of cement, tiles, bricks etc. as inputs for building construction.

18. Most of these core industries, notably iron and steel, fertilizers, pesticides, capital goods and bulk drugs require large-scale production to ensure economies of scale. While some of the larger African countries have the capacity and domestic market to set up such plants (and many of them have indeed done so), the bulk of African countries are individually too small to go in for such ventures on an economic basis. An important possibility is the setting up of multinational projects based on subregional or regional co-operation and extended subregional and regional markets.

19. There are, however, a number of industries within the core list that can be operated in the small and medium sectors and so cater economically for smaller markets. These include foundries, forges and metal shops, pharmaceutical formulation units, plants manufacturing cement, bricks and tiles, and agro-processing plants. A study of locally available raw material resources and the absorptive capacity of local markets could reveal a number of viable propositions.

B.2. Agro-industrial linkages

20. Industrial development in any African country is closely linked with the development of agro-industrial processing. There should be a close linkage with the agriculture department, and an agriculture action plan should be incorporated in the national plan. The need for additional fertilizers and pesticides may require setting up industries or expanding existing ones within the country or within the subregion. Depending on the programme of development of various crops/plants, agro-industries have to be planned. Details regarding plant and equipment and the infrastructural requirements should be studied and the investment pattern worked out. Similarly, there could be a need to set up units for the manufacture, repair and maintenance of agricultural tools and equipment. The whole national plan pertaining to agricultural and agro-industries development has to be worked out on a yearly basis, and the inputs required have to be carefully assessed. The yearly plan should also indicate the output expected over a period. A composite programme of incentives also needs to be developed.

21. In order to ensure that all these inter-linkages are harmoniously and efficiently co-ordinated and implemented, it may be necessary to create a body specifically charged for that purpose. It is proposed that countries consider the creation of a national agro-industrial commission to identify input requirements for the regeneration of agriculture, promote production and stimulate industries based on agricultural outputs.

B.3. Food industries

22. An integral part of the agro-industrial interlinkage is the development of food processing. A review of the implementation of UNPAAERD with respect to food industries revealed a decline in production at an average annual rate of 2.4% between 1980 and 1985, compared to an annual increase of 9.7% over the previous years.

23. The recommendations of that review include the following:

- "(a) Give priority to small-scale food-processing industries;
- (b) Prepare and implement development policies and strategies aimed at improving techniques, efficiency and product quality of the informal food-processing branch;
- (c) Fix quotas and/or ban imports of foodstuffs such as rice which can be produced locally or wheat which can be replaced by local commodities in order to encourage increased local production;
- (d) Rehabilitate, expand and diversify existing food industries;
- (e) Promote at subregional and regional levels, mechanisms for co-operation, exchange of technologies and experiences in the field of food-processing." 1/

24. In the context of agro-industrial linkages and food-processing industries, the integrated programme approach to food-processing and other agro-related industrial subsectors in Africa has been developed by UNIDO. The approach provides a tool for the systematic development and pragmatic planning of agro-industries in Africa. Countries can greatly benefit from this integrated approach in programming the second IDDA. Governments can request UNIDO assistance to make use of the proposed instrument and identify related investments and policies (see Annex II for details).

B.4. Fisheries industrial systems

25. A model for the application of the integrated programme approach to the fisheries industrial systems in Africa has been developed by UNIDO. 2/ On the basis of data collected in co-operation with FAO, a sectoral typology of the fisheries industrial systems of developing countries has been prepared. Ten groups of countries were identified as having discrete development patterns and development potential. The analysis examined potential fish resources, manpower, equipment and markets and summarized favourable and adverse factors. On this basis, a series of planning objectives was suggested for each country group, along with a proposed strategy to achieve the desired goals.

26. On the basis of the sectoral typology, representative countries of several country groups, all located in West Africa, were selected for further analysis, and indicative development programmes were designed for each one that included integrated packages of technical assistance projects and related investments and policies.

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- 1/ See "Report to the ninth meeting of the Conference of African Ministers of Industry on the Implementation of UN-PAAERD with Respect to Food-Processing Industries in African Countries" (CAMI.9/19:ICE/1989/19), May 1989, p.14.
 - 2/ See "Integrated Planning of Fisheries Industrial Systems in Africa", (CAMI.9/2:ICE/1989/2), 14 March 1989.

27. Sectoral typologies and indicative programmes can be used by Governments in preparing integrated sectoral development programmes for fisheries and the other subsectors covered (see Annex II) in a variety of ways. They can be used, for example as:

- (a) Guidelines for developing countries on planning their own fisheries sector and securing more integrated and well co-ordinated technical assistance;
- (b) Guidelines for UNIDO for the design of integrated technical assistance programmes;
- (c) A guide to promote economic and technical co-operation among developing countries (ECDC/TCDC);
- (d) A tool to evoke interest of donors and developing countries in the design of country specific programmes.

B.5. Pulp and paper industries

28. A study conducted by ECA on the pulp and paper industries and projects in Africa 1/ was also endorsed by the ninth meeting of the Conference of African Ministers of Industry. The recommendations in the ECA paper as summarized below should be considered for inclusion as a prime activity in the second IDDA:

29. "At the production level give immediate technical, managerial and financial assistance to pulp and paper producers to improve their (a) capacity utilization; (b) efficiency of operation; and (c) quality of products.

30. Enhance, inter-alia, industrial training for management, process operation and maintenance personnel; exchange programmes within the region; and training arrangements with pulp and paper mills in developed and developing countries.

31. At the national level encourage and assist local pulp and paper mills to improve, rehabilitate and expand their operations;

Carry out detailed studies on:

- * National market for paper;
- * Local raw materials for pulp and paper making;
- * Potential for paper making from waste paper and other residues;
- * Rehabilitation/expansion/diversification of existing pulp and paper mills; and
- * Assessment of up-dating of existing projects.

32. Determine what the country can do on its own, and the areas and modalities required for co-operation with other African countries;

33. Undertake pre-investment activities and studies on projects that seem to be justified at the national level and subsequently follow their implementation;

1/ See "Survey of the Pulp and Paper Industries and Projects in Africa" (CAMI. 9/8:ICE 1989/8), May 1989, p.23.

34. Promote the development of physical and institutional infrastructures that would facilitate the development of pulp and paper industry."

B.6. Leather and leather products

35. The development of hides and skins, leather and leather products industries requires high priority. This development can be both at the national and subregional levels and is an excellent area for small-scale entrepreneurs. UNIDO is currently implementing an "umbrella project" in East Africa together with eight associated country projects. This programme, which is supported by multi-donor country funding and carried out in co-operation with FAO and the International Trade Centre (ITC) follows an integrated regional development approach and covers the entire leather industrial system from hides and skins improvement to leather and leather products. It is further supported and complemented by a parallel programme of tannery rehabilitation. The programme can be seen as a model for the application of the integrated programme approach to the development of an industrial system and could be applied elsewhere in Africa in developing the leather and leather products industry.

C. Support programmes

C.1. Programmes to strengthen human resources and technical capabilities

Development of entrepreneurship

36. For industrialization to take place, there must be people willing to take risks and invest their money in manufacturing. The major role which the public sector plays in Africa stems largely from the lack of an indigenous entrepreneurial class in industry. Policies have to be developed to attract investors to industry and away from mere trading activities, and to upgrade informal sector operators into small and medium-scale industrialists. Action in this area should include: (i) identifying the class of people to be developed e.g. graduates, school leavers, retired civil servants, skilled craftsmen in the informal sector; (ii) preparing learning packages and investment opportunity profiles; (iii) developing a package of incentives and head-start programmes including soft loans, guaranteed loans, low equity contribution; (iv) using local consultants for industrial extension services; (v) identifying growth poles and negotiating ancillarisation and subcontracting. This programme should go hand in hand with the development of small and medium-scale enterprises. A national small-scale industries corporation can be established to be the apex organization for all the support mechanisms for entrepreneurship development and small and medium enterprise development.

Training and skills development

37. The first step to be taken is to review the skills scenario of the country. This is a two-way exercise:

- (a) Assessing the country's manpower requirements for industrialization, both in terms of numbers and in terms of skill levels;

- (b) Taking stock of the existing human resource base. This exercise will reveal the gaps which need to be filled. Such manpower planning exercises have been undertaken in several African countries. They need to be updated on the eve of the second IDDA and with specific reference to the projects and programmes selected for implementation during the Decade.

38. Industrialization requires technically qualified manpower and an industrial culture. Technology must go hand in hand with the development of technical skills. In many African countries, there are well-trained engineers but no skilled artisans and technicians to work with them. Developing a workforce with the right occupation-specific skills is a task which must be taken seriously. Action in this area requires:

- Reviewing the institutional framework and policies for skills training;
- Reviewing vocational, educational and training syllabi to bring them into line with the requirements of industry;
- Developing strategies that will emphasize on-the-job training, apprenticeship to master craftsmen or technicians, and increased participation of employees in the public and private sectors;
- Financing skills development.

39. Countries may consider the need to establish a central body or agency to co-ordinate training schemes, ensure their coherence with national needs, and administer the funding, certification and placement.

Development of technical capabilities

40. This relates to a higher level of skills. These include skills in research and development; skills in project identification, preparation of feasibility studies and project reports; supervisory and management skills; engineering skills of all kinds; industrial and financial planning skills; and skills for negotiating the procurement of technology equipment and consultancy services, plant erection and installation, etc. Action in this area will include:

- Reviewing the curricula of institutions of higher learning;
- Establishing centres of excellence for specific technical skills training;
- Strengthening existing science and technology and research institutions;
- Developing demand-oriented training programmes by adopting strategies that emphasize skills acquisition through joint ventures, training as part of technology acquisition, internship of public servants in industry and vice versa;
- Funding universities with schools of engineering should be funded to establish a faculty of industrial management with such courses as: manufacturing systems analysis and design, manufacturing processes related to core industries in the country, engineering design, production engineering, industrial finance and marketing, energy economics, industrial economics, biotechnology and computer science;
- Developing entrepreneurial and management skills for large-scale public enterprises, for example through giving greater autonomy to management, together with an incentive scheme for better performance.

C.2. Programmes for the development of physical infrastructure

41. However valid the feasibility studies, however efficient the management, the external environment within which an industrial project operates tends to determine its effectiveness. Studies of the failure of many African industrial investments reveal that one of the adverse factors was the lack of the requisite back-up support through physical infrastructure.

42. The basic components of the physical infrastructure include, inter alia:

- | | |
|-----------------------|---------------------|
| - Roads and bridges; | - Railways; |
| - Ports and harbours; | - Inland waterways; |
| - Telecommunications; | - Postal services; |
| - Trucking services; | - Civil aviation; |
| - Shipping; | - Housing; |
| - Water supply; | - Energy; |
| - Storage facilities; | - Market sites. |

43. The components of physical infrastructure in most African countries are handled separately by different ministries and agencies, all of which are competing for funds and for a share of limited resources. There is a need to take an integrated view of the infrastructural changes required at a national level rather than treating it on a piecemeal basis. The national co-ordinating mechanism already in place for the second United Nations Transport and Communications Decade for Africa (UNTACDA II) should take into account and harmonize the infrastructural needs of the second IDDA programme.

C.3. Programmes to develop the industrial institutional infrastructure and basic services

C.3.1. The role of Government

44. The climate for industrial investment and successful operation of industries is, to a large extent, determined by the nature and direction of the policy framework, particularly in such areas as:

- Long-term planning;
- Taxation policies;
- Foreign exchange policies;
- Import-export policies;
- Licensing of industries;
- Protection;
- Degree of state investment in industry;
- Pricing policies;
- Subsidization policies;
- Allocation of resources;
- Attitude towards private enterprise;
- Attitude towards foreign investment.

45. There is a need to articulate, within the national industrial development plan the objectives of industrialization and the selection of the industrial investment portfolio. These objectives should be matched by supportive public policies. There is also a need to strengthen the Government machinery in this area by, inter alia, the following measures:

- (a) Training high-level Government officials, particularly in the areas of industrial planning, strategic management, sectoral integrated approaches, policy formulation in support of industrialization, debt management, export promotion and technology selection. A series of high-level national and subregional workshops on these subjects could usefully be arranged under the IDDA programme.
- (b) Promoting teamwork and co-ordination between all agencies concerned. The second IDDA is conceived as a network of inter-related and interdependent activities aimed at advancing industrialization. Task forces and working groups need to be actively and continuously engaged.

C.3.2. The economic operators

46. The economic actors, namely industrial business firms, must be actively associated with the process of planning and policy-making. Thus, in addition to public enterprises, a significant effort should be made to include the actual investors, entrepreneurs and producers, as well as chambers of commerce and industry and various professional associations in all phases of the planning process.

Public enterprises

47. Given the dominant position of public enterprises in most African countries, the successful development of the industrial sector is greatly affected by how they operate. The record so far has not been encouraging. Rationalization, introduction of professional management, greater managerial autonomy and freedom from political and bureaucratic pressures could contribute to making them function more effectively.

The private sector

48. It should be one of the prime objectives of the second IDDA to encourage the growth of a truly African private enterprise sector. Governments may have to play an activist role to stimulate private sector entry into industry through:

- * Entrepreneurship training schemes;
- * Provision of loan finances;
- * More liberal licensing;
- * Encouragement of nationals living abroad to return home as investors;
- * Providing more elbow room by reducing public sector monopolies;
- * Privatizing, where appropriate, industrial activities of the public sector;
- * Encouraging the public enterprises to sub-contract work to private sector ancillaries;

Development of small- and-medium scale industries, the informal sector and rural industries in Africa

49. The development of small- and medium-scale industries in the African context have many advantages. The scale of investment is manageable, the technologies are easily absorbable, the generation of employment is very high, and above all, they provide a training ground for entrepreneurial

development. Therefore the second IDDA should include the promotion of African small- and medium-scale industries and their integration with large-scale industries as a priority focus.

50. The catalytic support of the public authorities is needed and the national industrial development plan should spell out the nature and direction of such support including, inter-alia:

- Enunciation of a national policy relating to the growth of small- and medium-scale industry;
- Liberalization of licenses for setting up small- and medium-scale industries;
- provision of support services to assist small- and medium-scale industrial units including:
 - (a) Loan finance on favourable terms;
 - (b) Setting up industrial estates;
 - (c) Provision of water supply and energy and other infrastructure;
- Entrepreneurship development schemes to train existing and potential small-scale industrialists;
- Assistance in securing foreign technologies;
- Grant of import licenses for equipment and essential inputs;
- Establishing or strengthening institutions for the promotion of small-scale industries, preferably giving such institutions "single-window" powers to undertake the variety of support services outlined earlier;
- Training and orientation of administrators of such organizations.

51. Special attention needs to be paid to the very large informal sector in Africa, which in fact is playing a major role in the economy of the continent. Steps should be taken to consider how best to bring the informal system within the formal system. Training and assistance schemes to upgrade informal operators into small- and medium-scale entrepreneurs need to be promoted.

52. The high priority given to agro-industries in the second IDDA should also result in stimulating rural industries. This will serve the purpose of generating local employment, reducing pressure on metropolitan cities and strengthening the agro-industrial linkage.

C.3.3. Foreign investment

53. The funds which Africa can mobilize itself will hardly be adequate for the ambitious investment plans of the second IDDA. The debt burden, which is already so large, and the implementation of structural adjustment programmes imply that further commercial borrowing from abroad will have to be viewed with extreme caution. It would, consequently, be to the advantage of Africa to attract foreign capital, preferably in the shape of equity in joint ventures with domestic investors.

54. The right climate of political and economic stability, availability of infrastructure and public policies supportive of industry would need to be created. A review would need to be made of investment codes and bureaucratic procedures for simplification and rationalization. Special institutional mechanisms such as investment centres or national investment commissions may need to be established. The publication and dissemination of investors guides giving details of investment opportunities, investment laws and facilities would be useful. Several African countries have published such guides with the technical assistance of UNIDO.

55. In this context, attention is invited to the industrial investment programmes of UNIDO (see Annex III) and to the programmes of ADB, IFC and UNDP and others in the same area.

C.3.4. Other supporting institutions

56. Other supporting institutions which need to be strengthened include:

- Technical schools and universities;
- Enterprises supplying raw materials;
- Enterprises involved in the distribution system;
- Research and development bodies;
- Firms providing consultancy services;
- Firms capable of preparing feasibility studies and project reports;
- Quality control and standards bodies;
- Development banks;
- Commercial banks;
- Commodity markets;
- Stock exchanges;
- Chambers of commerce;
- Industry associations;
- Trade unions.

57. All these agencies should be mobilized to contribute to the second IDDA. They need to be involved from the planning process to the stage of implementation. It would be desirable to identify all the institutions concerned and define their respective roles and responsibilities.

C.3.5. Developing an investment portfolio

58. The shelf of projects, programmes and supporting activities is indicative in nature. It could be used in the preparation of national as well as subregional programmes. It needs to be emphasized that in doing so, a systems approach should be adopted that keeps in mind the interconnections between various activities and the need to develop an integrated programme. The modality of developing an appropriate portfolio will be dealt with in the guidelines (Chapters IV and V).

D. Special programmes for LDCs

59. If Africa as whole is in a bad shape, the position of African LDCs is even worse. A survey conducted by the European Community shows that of 343 industries surveyed in LDCs, only 20 were operating satisfactorily. LDCs undoubtedly demand special attention in the second IDDA.

60. During the second IDDA, the assistance to the african least developed countries should focus on following priority major objectives: - an enlarged scope for rehabilitation, maintenance and upgrading of existing production facilities, expansion of the productive potential in line with dynamic comparative advantages, available resources and internal, and external market prospects, and the diversification of their productive base. It should be also taken into account the full training, involvement, integraton and participation of all groups. Special attention should be given to the improvement of the industrial institutional capabilities such as building and maintaining major training institutions at national and suregional levels, building endogeneous capacities to assess, adopt and internalize science and technology.

61. Programmes and projects for upgrading individual capabilities in the private sector in industrial development with due recognition of the human element, in terms of skills, motivation and innovation should be considered as a must.

The second IDDA may assist the african LDC in the main following areas:

- Human resources development;
- Improvement of industrial capabilities;
- Industrial rural development and promotion of locally based industry;
- international support for industrialization (investments, promotion, transfer of technology, industrial planning strategy, etc.).

62. Further details and recommendations are contained in a study prepared on industrial development of African LDCs 1/ and another on industrial development of LDCs in the 1980s and prospects of the 1990 2/. Further adjustments of LDCs programme for 1990 would be provided in September 1990 as follow-up action to the second substantial New Programme of Action for the Least Developed Countries (SNPA II).

IV GUIDELINES FOR GOVERNMENTS

63. To ensure that well-meant resolutions and proclamations of industrial goals and objectives are to be translated into tangible results, they must be backed up by a systematic set of sequential actions. The following four broad categories of action are proposed:

- (a) Analysis of the industrial sector;
- (b) Preparation of the national programme for the second IDDA;
- (c) Modalities for formulation and implementation;
- (d) Obtaining financing and major factor inputs.

A. Analysis of the industrial sector

1. A factual survey

64. The first task is to compile an analytical survey of the industrial sector in the country, making full use of existing surveys, including UNIDO Industrial Reviews, UNDP programming mission reports, etc. The analyses should consider both quantitative and qualitative dimensions.

Quantitative aspects would include:

- * Structure and pattern of the industrial sector and its breakdown into sub-sectors;
- * Current level of manufacturing value added (MVA) and its percentage share in gross domestic product (GDP);
- * Performance, including productivity, capacity utilization, employment, industrial exports and imports;
- * Industrial investments made during the first IDDA and projects under implementation.

1/ CAMI. 9/15: ICE/1989/13

2/ A/CONF/147/PC/3/Add.13, TD/B/AC.17/31/Add.13

Qualitative aspects would include:

- * Present availability of skills and future creation of such skills by the industrial sector;
- * Level of entrepreneurship development;
- * Quality, competitiveness and comparative costs of domestic industrial production;
- * Market orientation;
- * Degree of use of domestic factor inputs and degree of dependence on imported inputs.

2. A review of the regulatory framework and public policies affecting industrialization

65. The climate for industrial investment and the successful operation of industrial units is conditioned by the package of government policies affecting industrial growth. The analysis should therefore include a review of all such policies to see whether they are supportive of industrial development or whether they create bottlenecks and handicaps. The policies include those on taxation, import-export licensing, industrial licensing, foreign exchange allocations, pricing, protection, subsidisation, resource allocations, rules regarding foreign investment and so forth.

3. An examination of problems and constraints

66. If a realistic programme is to be drawn up, it is necessary to analyse the constraints, handicaps and bottlenecks which arose in the previous Decade and to assess whether they still persist. These constraints could be either endogenous or exogenous. In respect of endogenous constraints, corrective action could be planned for the second IDDA, which may include changes in public policies, strengthening of infrastructure, filling gaps in human resources, etc.

67. Exogenous constraints are prima facie beyond the country's control. But an understanding of external constraints would provide pointers for investment priorities, review of international marketing arrangements, securing donor aid and technical assistance and collective action at the subregional and regional level.

4. Identifying potentials and priorities

68. The identification of national industrial potential must be viewed in terms of promoting internal engines of growth and greater use of domestic factor inputs. This would call for a re-assessment of the domestic resource base, physical and human, including:

- Human resource base;
- Agricultural resources;
- Mineral resources;
- Forest and fishery resources;
- Other domestic raw materials;
- Energy resources.

69. A pragmatic programme would seek full exploitation of these domestic resources and avoid investments which are heavily dependent on imported inputs. Part of the "potential" lies in existing industrial assets which are underutilized.

The priority exercise is at two levels:

- (a) The relative priority given to industrial development within the overall national plan and the funds released for the purpose;
- (b) Within the industrial sector, the gradation of investment choices based on a set of criteria related to the goals of the second IDDA and also on the analytical survey of constraints and potential. (See Annex VI on the suggested criteria applicable for the selection of core industries.)

B. Preparation of the national programme for the second IDDA

70. The analytical survey will provide a firm foundation for a realistic national programme. Because the programme is not merely a compendium of various independent projects but part of an integrated strategy and interdependent network, it would be desirable that it takes the shape of a national industrial development programme (1991 - 2000). In turn, the industrial programme will be a part of a wider exercise of the national development plan, which is multi-sectoral in nature.

71. Under the first IDDA, some countries had embarked on the elaboration of industrial master plans using the strategic management approach. These countries now need to determine, within the ambit of their master plans, what can be achieved during the decade 1991-2000, taking into consideration these guidelines.

72. For other countries, whose industrial plans form a chapter within the national development plans, which usually cover a period of about 5 years, a perspective view of ten years should be taken in adopting the second IDDA programme. In practical terms, however, implementation would necessarily have to be linked to the five-year plans.

1. Objectives, strategies and policies

73. The programme should be underpinned by a statement of national industrial objectives. These objectives will no doubt be based on the broad goals adopted for the second IDDA, suitably adjusted to the local environment and special national features. As far as possible, a quantification of objectives should be attempted, such as the projected growth in MVA, industrial exports or improvement in productivity.

74. Strategies are instruments for attainment of the chosen objectives. Thus, strategic approaches need to be developed, inter alia, for:

- (a) Use of domestic factor inputs;
- (b) Agro-industrial linkage;
- (c) Linking physical and institutional infrastructure to industrial development;
- (d) Promoting entrepreneurship and small- and medium-scale industries;
- (e) Human resource development;

- (f) Employment generation;
- (g) Involving women in development;
- (h) Spatial planning and development of rural and backward areas;
- (i) Energy planning and conservation;
- (j) Environmental issues;
- (k) Market orientation, development and integration.

75. A restatement of policies designed specifically to support the successful execution of the programme, is necessary. These policies should include, in particular, new approaches to promote the private sector, small- and medium-scale industries, the informal sector, foreign investment, taxation, import-export licensing and industrial licensing.

2. Selection of priority investment programmes

76. While some areas of investment have been indicated in Chapter III, the choice must ultimately be based on sound economic considerations. The preparation of programmes and projects should keep in mind the need to develop the core sectors and to promote use of domestic factor inputs. Investment choices must be based, not on any a priori ideas, but on the sound basis of national endowments, national capabilities, national markets and national aspirations.

77. To this end, it is necessary to increase the use of feasibility studies and project reports which examine all aspects of the projected investment, i.e. technology, raw material availability, human resource availability, adequate markets and financial viability and social cost-benefit considerations. There is need to build up domestic capability for undertaking the preparation of such feasibility studies. The preparation of the investment portfolio should, hopefully, be completed within the first two years of the Decade.

3. Costing the programme

78. The most difficult, and yet a very necessary part of programming, is the estimation of costs. Admittedly it is not easy to cost a programme covering ten years, given the factors of cost escalation, volatile international prices and changes in currency exchange rates. Nevertheless, some reasonable estimation needs to be made, preferably during the first two years of the Decade, in order to judge the practicability of the programme.

79. In the case of industrial projects, cost estimation is an integral part of feasibility studies. In the case of expenditures to be incurred from the public exchequer, estimations are likely to be included in national five-year plans. In the case of private and foreign investments, a reasonable assessment will need to be made on the basis of the role assumed for these projects in the programmes. A vital aspect of cost estimation is the ratio between local currency costs and foreign exchange costs. Apart from the problem of foreign exchange shortage, a higher proportion of local currency costs is evidence of greater use of domestic factor inputs and thus deserves higher priority. By the same token, feasibility studies should indicate this ratio in production cost estimates.

C. Modalities for formulation and implementation

1. Modalities for formulation

80. The national programme for the second IDDA is conceived as an interdisciplinary exercise involving a network of agencies. The formulation should be undertaken within the framework of the national co-ordination committee for IDDA or equivalent body. It is therefore important that consultative mechanisms be established to involve all relevant Government agencies including the ministries of industry, finance, planning, agriculture, natural resources, energy, transport and communications, education, trade and commerce. In addition, consultations on plan formulation should involve parastatal bodies dealing with infrastructure, public and private enterprises, small-scale units, educational and research institutions, chambers of commerce, manufacturers' associations, development banks and financial institutions.

81. Governments could usefully adopt the UNIDO approach to strategic management of industrial development. The approach is multi-disciplinary and based on the concept that industrial subsystems^{1/} are the proper level for action, that action should be concerted, involving Government agencies, industrial firms, banking institutions and suppliers of inputs, and that action must be continuous and progressive, adjusting quickly to changing conditions. The advantage of this approach is that it fully involves the actual economic operators in production and the market place. The approach is currently being applied in ten African countries (see Annex IV for further details).

2. Modalities for implementation

82. The implementation process will also involve inter-agency co-operative efforts and networking. Governments may consider setting up subsectoral strategic management committees, or assigning their functions to existing bodies, as appropriate. It is not intended to promote a proliferation of new agencies, expanding the bureaucracy. Rather these functions are perceived as part of the systems approach, which can in many cases be best carried out by networking existing institutions. The areas to be covered by the subsectoral strategic management committees include the following:

1. A national agro-industries commission;
2. A national commission to revitalize the public enterprise sector;
3. A specialized wing of the ministry of industry to promote rehabilitation of ailing industries, introduction of a campaign for preventive maintenance and a programme for manufacturing spare parts;
4. A national industrial manpower task force;
5. An inter-disciplinary team to review the physical infrastructure.

^{1/} An industrial subsystem is a network of productive and service activities which develops around a basic resource and/or a final market and/or a technology. The subsystem includes not only the industrial activities but also all the supporting services (supply, distribution and marketing, transport, financing, development of technology and training).

83. The role of these committees would be to formulate and monitor the strategies and action programmes for the restructuring or development of specific industrial subsystems which offer opportunities for efficient and competitive industrial activities. The role of the Government would be to support the operators of each subsystem in implementing the strategies and action programmes with specific measures and policies, which are consistent with the overall macro-economic and sectoral objectives and policies. The role of IDDA would be to assist the Government in formulating a programme of technical co-operation to support these activities, in mobilizing and monitoring the required technical and financial assistance, and where appropriate, in supporting some key technical co-operation projects.

D. Financing and major factor inputs

84. Finally, the national programme must tackle the problem of securing resources for its implementation. It is of course understood that the mobilization and deployment of resources is a national exercise involving all sectors of the economy, of which the resources allocated to industry are only part.

Financial resources can be mobilized from:

- (a) Domestic sources:
 - Budget allocations;
 - Domestic savings;
 - Surpluses of public enterprises;
 - Private investment;
 - Loan funds from development and commercial banks.
- (b) External sources:
 - Foreign loans;
 - Foreign investment;
 - Donor assistance;
 - UN technical assistance;
 - Seed money.^{1/}

85. Given the budgetary deficits of most African countries, the prospects which need to be explored are those of promoting public enterprise surpluses, stimulating domestic savings and private investment, as well as soft loans from abroad, and attracting foreign investment.

86. The resource mobilization exercise must also assess the requirements of other inputs such as raw materials, equipment and human resources, with the aim of securing a substantially higher proportion of domestic factor inputs.

V. GUIDELINES FOR SUBREGIONAL PROGRAMMES

87. The guidelines for the subregional programmes are in line with Resolution 2(IX) and Decision 2(IX) of the ninth meeting of the Conference of African Ministers of Industry, which urged Member States and organizations to give priority to the implementation of the projects retained in their revised subregional programmes and to strengthen or establish new mechanisms for ensuring effective follow-up and monitoring of their implementation. It is equally necessary that the leaders of subregional organizations such as the Economic Community of West African States (ECOWAS), the Preferential Trade

^{1/} See Annex V for a description of the "seed money" concept.

Area for Eastern and Southern African States (PTA), the Economic Community of Central African States (ECCAS), etc. should meet and harmonize relationships between and among the various economic groupings.

A. Evaluation of subregional industrial co-operation and identification of subregional priorities

88. For each subregional programme, as in the case of country programmes, the first step is to analyse and evaluate the achievements and failures of co-operation at bilateral, multinational and subregional levels in the following areas:

1. Legal framework and policies, with reference to mechanisms of co-operation, their utilization, constraints, possible duplication, etc.
2. Direct industrial project promotion
 - (a) How many production units have been established - bilateral, multinational and subregional?
 - (b) Have they been commissioned and are they producing? What is the extent of capacity utilization?
 - (c) What practical lessons can be drawn from the approach used in their implementation?
3. Industrial support services
 - (a) What kinds of subregional industrial co-operation exist, if any, for the following:
 - Research and development;
 - Engineering design and product development;
 - Management training and/or industrial skills development;
 - Exchange of industrial information and market information;
 - Technology development and adaptation;
 - Standardization and quality control;
 - Harmonization of investment policies.
 - (b) What kind of co-operation exists, if any, in the following areas:
 - Energy resources;
 - Transport and communications;
 - Telecommunications;
 - Building and construction.
4. Trade policies
 - (a) Are there any policies on trade liberalization among members? How is it working?
 - (b) How much trade now exists in industrial inputs and products among members? How does it compare with 1980, 1985?
 - (c) How much trade exists with the rest of Africa? Rest of the world?

89. This exercise should be carried out by the secretariats of subregional organizations.

90. Analyses of the information obtained from the evaluation of subregional industrial co-operation will provide the basis for identifying areas of industrial co-operation and for establishing priorities.

B. Preparation of subregional industrial development programmes for the second IDDA

(a) Definition of objectives, strategies and policies

91. In addition to the above evaluation, and embarking on the preparation of the programmes for the second IDDA, each subregion should review the revised subregional programme carried over from the first IDDA, especially in terms of the objectives and strategies, given the context of the 1990s and the challenges and opportunities they are likely to bring.

(b) Selection of priority investment programmes

92. In the process of developing national industrial development plans, each country should identify projects that could qualify as subregional projects. The following criteria are suggested for pre-qualifying a project as a subregional project. It should be one that:

- Contributes to the overall objectives of IDDA, i.e. leads to a higher degree of self-sufficiency for the country and the subregion, and also contributes to self-sustaining growth;
- Is too large in relation to the country's market or requires heavy investment beyond the country's capacity; but
- Can utilize local raw materials and other local inputs (energy, human resources) to produce intermediate goods for the country or for industries in neighbouring countries, thus reducing the overall dependence of the subregion on outsiders;
- Has export potential or will enhance the export potential of other countries in the subregion;
- Creates linkages with other sectors, especially agriculture, energy generation, transmission and distribution, and transportation;
- Increases the country's capacity to meet the basic needs of the population; or
- Contributes to economic integration of the subregion.

93. It will also be necessary to identify the physical and infrastructural constraints which cannot be removed by national effort alone, as well as deficits in the stock of human capital for industrial development. By the same token, it will be important to identify resources for training, research and development, consultancy, production of spares, and engineering design that are not being fully utilized and which can be put at the disposal of other Member States on a cost-sharing basis.

94. The next step is to aggregate the subregional projects identified by each Member State and sort them out into sectors and subsectors. UNIDO's integrated programme approach will be a most useful programming tool. Keeping the objective of self-reliance and self-sustainment in view, each subregion should ensure that there is a proper mix of core and basic industries that can support existing industries as well as other economic and social activities. These include:

1. Basic chemical industries;
2. Iron and steel industries;
3. Engineering industries;
4. Agriculture machinery and equipment industries;
5. Road and rail transport equipment manufacturing;
6. Energy equipment;
7. Fertilizers;
8. Pharmaceuticals;
9. Building materials;
10. Food-processing industries.

(c) Costing of the programme, including investment portfolio

95. The problem associated with the subregional industrial projects identified during the first IDDA was that most projects were proposed without proper costing. They could not be costed without feasibility studies. It is important therefore that each proposed project should find a sponsor who should arrange funding for, at least, the prefeasibility studies, in order to produce preliminary costing. In order to ensure proper utilization of funds earmarked for project studies, the following proposals are suggested:

- Setting up subregional trust funds with UNIDO for pre- and full feasibility studies;
- Exploring the possibility of utilizing the APDF set up by IFC, ADB and UNDP in co-operation with some developed countries;
- Having subregional development banks and funds set aside a percentage of their operational funds for project preparation, feasibility studies and sponsoring investment forums (see Annex V);
- Exploring the possibility of using the UNIDO project preparation facility.

96. An investment portfolio should then be compiled, which contains only projects that have been studied, costed and found feasible and bankable.

C. Modalities for formulation and implementation

(a) Modalities for formulation

97. The next step would be to develop a subregional industrial programme, which could follow the strategic management approach developed by UNIDO (see Annex IV). This may require establishing at the subregional level an industrial promotion co-ordinating committee, if none already exists, whose function will be to co-ordinate the formulation and implementation of all industrial programmes in the subregion, and report periodically to the legislative body of the subregion. Below it, may be a number of subsectoral strategic management committees established where necessary to coincide with the subsectors in which there are projects, e.g. metallurgical, engineering, agro-chemical, basic chemical and pharmaceuticals, building materials industries, etc. These committees could include representatives of Governments, public and private enterprises from each country operating in the subsector, organized interests such as chambers of commerce, shippers councils, manufacturers' association or associations of road transporters, national and regional financial institutions, etc.

98. The functions of these strategic management committees would be to assist the secretariat or "lead" subregional organizations in:

- Evaluating subregional industrial projects submitted by member countries or their nationals;
- Preparing subregional surveys of their subsectors with a view to preparing sectoral components of a subregional industrial master plan;
- Preparing investment profiles of selected projects for promotion among potential investors and financing institutions;
- Reviewing feasibility studies prepared on projects that are good candidates for implementation at the subregional level;
- Identifying specific areas and modes of co-operation between countries, as well as between producers and relevant institutions;
- Identifying and creating a network of institutions offering country-to-country co-operation in the areas of industrial training, industrial technology information, research and development;
- Organizing, with the assistance of UNIDO where appropriate, investor forums where approved projects can be placed before potential investors.

99. The industrial promotion co-ordinating committee will also have the function of monitoring intra-regional trade and suggesting policies to increase its flow, or to improve the investment climate so as to attract foreign investment for selected priority subregional projects;

(b) Modalities for implementation

100. Experience of existing patterns of co-operation show that where it is left with the host country, implementation tends to be faster, better co-ordinated and more successful; but those multinational ventures staffed by quotas of personnel drawn from participating countries tend to experience greater personnel and management problems. The experience of SADCC and some West African multinational cement projects are cases in point. While there is no panacea, it is important to work out the broad principles governing the relationships among the parties such as:

- Location of subregional industries;
- Supply and costing of energy;
- Purchase of intermediate goods;
- Equity shareholding, cross-equity participation;
- Incorporation of subregional or multinational enterprises;
- Manpower recruitment and training;
- Subcontracting;
- Joint ventures involving technical partners from outside the region;
- Exchange of information between the multinational enterprises and similar national enterprises, especially of a proprietary nature;
- Private enterprise/private enterprise co-operation;
- Marketing arrangements within the subregion and outside the region;
- Use of consultants - local and foreign, etc.

Strengthening regional and subregional co-operation in support services:

101. The areas to be covered include the following:

- Engineering services;
- Industrial training;
- Management;
- Consultancy services;
- Industrial and trade information;
- Science and technology;
- Trade in manufactures, raw materials and intermediate inputs.

102. The strategy of self-reliant and self-sustaining industrial development demands that capabilities in these areas be enhanced as a prerequisite for further development. During the first IDDA, regional co-operation and technical assistance in these areas fared much better than in direct production. It is therefore important to review the progress achieved in these areas, to examine the institutions established and their functioning, and to propose measures to strengthen them in the areas where they are weak by:

- Establishing linkages between similar institutions in order to enable their staff to exchange information, share experiences and even share specialists and trainers, as well as to harmonize their programmes to avoid duplication of efforts;
- Harmonization of national policies on the development of industrial and technological manpower to enhance region-wide recruitment for multinational enterprises;
- Developing programmes for joint acquisition of technology and exchange of technical information;
- Setting up a network for information exchange on science and technology;
- Adoption of common codes in the area of trade in order to facilitate and increase intra-African trade;
- Establishing trade information centres in capitals in order to enhance awareness of what is being produced in the region;
- Encouraging the establishment of subregional chambers of commerce and manufacturers' associations;
- Encouraging the development and establishment of a scientific community in each subregion.

Industrial consultations and negotiations

103. African countries should use the UNIDO System of Consultations to have access to information on the required inputs for the preparation and implementation of subregional programmes for the second IDDA.

104. A system of intra-African consultations on industrialization in Africa could be used to discuss trends in particular sectors, the changing pattern of demand, production technology or other problems which might have an impact on the current situation of industrialization in Africa.

Financing and major factor inputs

105. Financing and factor inputs can come from within Africa or without. Self-reliance and self-sustainment demands that in the long run as much as possible of the inputs and financing should come from within. The problem therefore is how to mobilize funds and the major factor inputs, especially energy, raw materials and human effort. Action in this area should include:

- Reviewing and strengthening subregional financial institutions, and linking them to the ADB;
- Mobilizing subregional resources through subregional banks and funds;
- Strengthening co-operation between central banks;
- Encouraging cross-equity participation by Governments;
- Securing seed money for starting new enterprises (see Annex V);
- Removing tariffs on raw materials;
- Developing a regional or subregional energy conservation network, as co-operation in energy conservation may lead to surpluses that can be channelled to industry.

VI PROMOTIONAL PROGRAMMES

A. Policy and strategic framework

106. The strategic approach to promotion should cover four dimensions:

- * Promoting general awareness of the goals and strategies of the IDDA;
- * Promoting the development of action-oriented skills to create the basis for an industrial culture;
- * Promoting institutional effectiveness;
- * Promoting synergy, networking and a systems approach to the implementation of the second IDDA.

107. The principal achievement of the first IDDA is that it helped to develop a better perspective of the path to economic and industrial development. It promoted the concepts of self-reliance and self-sustainment and the strategy of increased use of domestic factor inputs and stimulation of internal engines of growth, thus lessening dependency on the industrialized world.

108. The promotional activities to be undertaken for the second IDDA need a qualitatively different dimension and a new direction and focus. The second IDDA will be a decade of action. Consequently, the promotional activities should be action-oriented, aimed not only at creating consciousness and preaching first principles, but at stimulating implementation and generating ways and means to put into motion the programmes of the second IDDA.

B. Pragmatic promotional activities would include:

- Training workshops on strategic management;
- Training workshops on the integrated programme approach;
- Seminars on regeneration of existing industries;
- Inter-country meetings on management of public enterprises;
- Workshops on preventive maintenance, quality control and standardization;

- Inter-country meetings to promote regional and subregional co-operation;
- Inter-country workshops on key industrial sectors, such as leather, pulp and paper, food-processing etc.

109. The choice of subjects bears significant implications for these promotional meetings. They determine the nature of participation. During the first IDDA, the promotional activities were largely directed towards national leaders, policy makers and senior Government officials. This strategy was necessary at that time to create a climate of acceptance of the IDDA concepts. Unfortunately, this consciousness did not trickle down adequately to the operating levels. While the participation of key Government officials will still be needed, the action-oriented thrust demands that the level of participation should now shift to operating levels: managers, technicians, planners etc, at the enterprise and agency levels, both from the public and private sectors.

110. With regard to the general promotion of awareness about the aims of the Decade and maintaining momentum, the ninth meeting of the Conference of African Ministers of Industry approved the annual commemoration of Africa Industrialization Day on November 20. It also accepted the proposal that each year would have a specific theme. Thus 1990 will be devoted to "linkage between industry, agriculture and food production". A number of proposals for activities for Africa Industrialization Day were also endorsed.

C. Financing the promotion programme

111. Since promotion is an integral part of the activities of the second IDDA, the national programmes would need to make a suitable annual provision for this purpose, under human resource and institutional development.

112. Technical assistance and donor aid should also be forthcoming. Many of the activities suggested are within the scope of UNIDO's ongoing programmes. A part of the funds allocated for the IDDA in UNIDO could also be deployed in this direction.

VII. CO-ORDINATION AND MONITORING

A. At the national Level

113. Performance evaluation and monitoring are continuous processes, and if they are to be managerially effective, they must be conducted at the operating levels. Therefore, adequate mechanisms for monitoring and evaluation need to be created in each agency and enterprise concerned with the second IDDA.

114. At the supervisory level, monitoring of the multi-faceted activities programmed for the Decade may not be feasible at one single focal point. In chapter IV, the establishment of a number of subsectoral strategic management committees has been proposed. These agencies are not intended to be new institutions increasing the bureaucracy. They are meant to build teams out of existing agencies for better co-ordination, inter-disciplinary adjustment and the development of a programme approach. In their respective fields, these commissions and committees should serve as effective monitoring mechanisms.

115. At the highest level, a cabinet committee could be established, including the ministers of industry, finance, planning and agriculture as members. Other ministers should be invited as and when inter-sectoral questions arise. This body should provide the overall co-ordination, receive all reports, particularly from the national co-ordinating committee, and make or authorize necessary adjustments in the approved programme. The ministry of industry should provide the secretariat. The committee should meet quarterly to review progress made on the implementation of the various sectors of the programme of the second IDDA.

B. At regional and subregional level

116. At the regional and subregional levels, organizations such as PTA, SADCC, ECOWAS, ECCAS and others should be fully involved in preparing the subregional programmes and should play a more active role in ensuring their full implementation. It would be necessary for these subregional organizations to review their own activities, and to adjust or develop mechanisms (if none already exist) for monitoring and co-ordinating the programmes of the Decade. Such monitoring and co-ordinating mechanisms should report every six months to the policy-making organs of the subregion.

C. At the international level

1. The role of UNIDO, ECA and OAU

117. At the international level, the role of the three co-sponsoring agencies of the first IDDA, i.e. OAU, ECA and UNIDO, must continue during the period of the second IDDA. These three organizations represent an optimum combination - OAU expressing the political will and solidarity of the continent, ECA with its multi-sectoral perspective of African development and UNIDO with its specialized responsibility within the UN system for the promotion of industrialization in the developing countries. The present set-up of the joint meetings of the three secretariats and the regular publication of periodic progress reports should continue. There should also be more frequent contacts at the professional level between these organizations in programme planning and execution.

118. More importantly, because there are other international and multilateral bodies whose activities will be relevant to the programmes of the second IDDA, e.g. the International Labour Office (ILO), the World Bank, the International Monetary Fund (IMF), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Centre for Science and Technology Development, the International Atomic Energy Agency (IAEA), the United Nations Conference on Trade and Development (UNCTAD), the Commonwealth Secretariat, the Africa, Caribbean and Pacific States/European Economic Community-Centre for Industrial Development (ACP/EEC-CID), etc., it is important that the secretariats work out a system of co-ordinating their activities with those of other agencies.

II. The role of UNDP

119. The activities of the many UN agencies engaged in technical co-operation in Africa may often have a direct impact on one another. As the agency that oversees and coordinates all UN technical assistance activities, UNDP should be more actively involved in planning and co-ordinating the activities of the second IDDA, as follows:

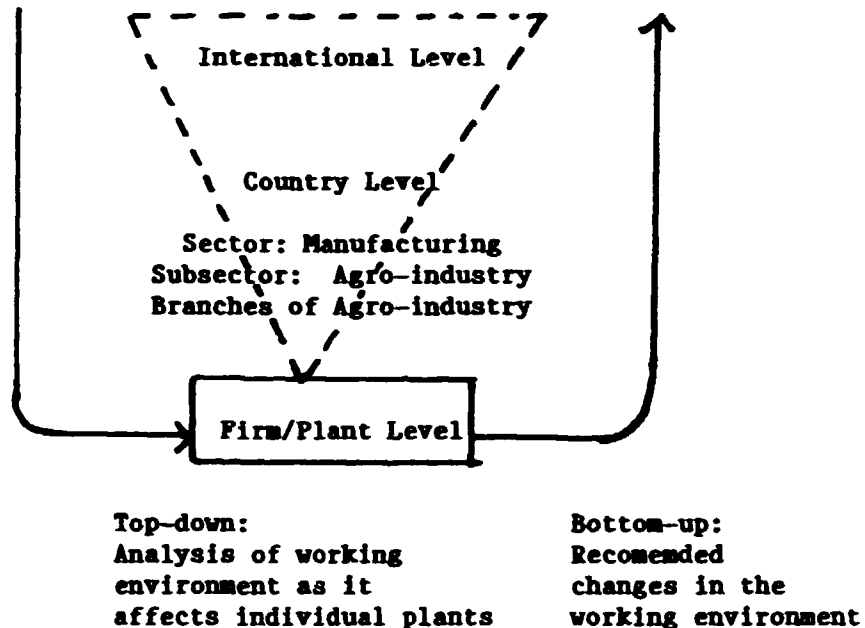
1. At headquarters, the Regional Bureau for Africa and Arab States, while preparing the regional programme for the Fifth Programming Cycle, should take an integrated view of the continent and ensure that the objectives and programmes which the African Governments design for themselves for the second IDDA are reflected in UNDP programming and budgeting. This should then be reviewed for the following programming cycle.
2. At the country level, UNDP offices should assist each country to achieve coherence and consistency in their national planning and make the maximum use of available technical assistance to further the goals of IDDA in that country.

ANNEX I

An integrated "top-down/bottom-up" approach to rehabilitation

1. Until now, most work in Africa on industrial rehabilitation has not been sufficiently systematic or comprehensive, and international co-operation has also suffered from these shortcomings. Rehabilitation has been viewed either as the treatment of the technical problems of a plant (without analysing the real causes or their ramifications) or as a macro-economic issue. In the first case, technical assistance activities have often been carried out in isolation from governments' fiscal, monetary and economic policies, without taking into account financial requirements, market possibilities, and the availability of raw materials and intermediate outputs. This approach has frequently resulted in rehabilitation projects that were too narrowly focused. Concentration on solving individual problems entails the risk of other problems being ignored. In the second case, the diversity of economic activities and economic potential at the micro-level is not always appreciated.
2. The concept of industrial rehabilitation clearly needs to be broadened and integrated: it should combine an understanding of both macro-economic forces and real problems at the plant level. Manufacturing enterprises should be studied in relation to their total economic environment. Diagnostic analysis and remedial action programmes should cover the entire range of technical, managerial and technology issues at the plant level as well as the overall financial, commercial and structural issues at the branch and macro-economic levels. An approach covering all these issues would be a top-down/bottom-up approach. It would start with an examination of the macro-economic level, descend through the sector, subsector and branch levels, and arrive finally at the plant level. On the basis of this approach, industrial rehabilitation would become an exercise in securing the optimal use of existing capacities and resources to promote industrial growth: it would become part of an attempt to regenerate the African industrial development process.
3. The integrated, multidisciplinary approach can be summarized in Figure 1 below. In order to assure that rehabilitation is not impeded by factors in the economic and institutional environment, the top-down analysis is followed by an assessment of each firm in terms of its rehabilitation climate, from the bottom up. In other words, an effort is made to assess what changes in the economic and institutional environment (e.g. government tariff policies, regulations concerning allocation of foreign exchange, etc.) constitute preconditions to successful rehabilitation. By examining the plant in its total working environment, both top-down and bottom-up, UNIDO believes it can identify the means for firms to achieve long-term viability.

Figure 1: Integrated multidisciplinary approach



4. The top-down/bottom-up approach leads to three main tasks. The first is to identify suitable enterprises where scarce foreign exchange and other investible resources will be most efficiently used to upgrade production and company performance, thus ensuring the greatest impact on overall growth. In particular cases, industrial rehabilitation may actually lead to plants being recommended for closure. In such cases, even though important social and political implications have to be considered, shut-downs cannot be excluded. The established concept of rehabilitation often restricts the view of decision-makers to existing industrial structures, whereas a wider and more forward-looking regeneration concept might help all parties concerned to see closure as a necessary part of an attempt to establish an industrial structure with better prospects for sustained growth.

5. The second task is to combine the plant rehabilitation process with a restructuring programme of the industrial sector as a whole so as to ensure growth, domestic economic integration, and/or the provision of support industries and services. Such a programme will entail investment in new capacities in industry, infrastructure, services and primary commodity production. The third requirement is to adjust the policy and administrative framework to support better the domestic and international efforts towards the industrial regeneration objective.

6. Rehabilitation can thus be seen to be a process that has technical, technological, organizational and managerial implications. It also has economic, financial, marketing, design and engineering aspects. Similarly, restructuring at the subsectoral level should take into account economic and financial aspects, as well as the general and technical management structure, product technology and range, and domestic and foreign markets. The wide range of issues involved implies that human, physical and financial resources should be concentrated on a few manageable projects or markets, and attention should be focused on technological developments and market trends.

7. As the approach covers a wide range of issues, successful implementation requires the mobilization of resources from domestic entities, both public and private, and from foreign multilateral, bilateral, commercial and financial bodies. The activities of these entities should be co-ordinated to provide the appropriate assistance to plants, subsectors and overall industrial regeneration.

8. The application of this approach will assist African Governments to link the macro-industrial, macro-economic, branch-level and project issues to the decisions to be taken on rehabilitation and upgrading of production. The approach is also expected to increase the rate of survival of particular plants or sub-sectors being rehabilitated, by giving due consideration to the context in which the selected plants or sub-sectors operate. Industrial rehabilitation must be a dynamic, forward-looking concept. Simply restoring industry is not sufficient, for both the world and economic conditions change rapidly, and these changes cannot be ignored.

9. Further information about UNIDO's approach to industrial rehabilitation can be obtained by contacting the Regional and Country studies Branch, UNIDO, Vienna.

ANNEX II

The programme approach

The UNIDO programme approach, which UNIDO has been applying systematically in Africa since 1989, is used to analyse industrial systems at three levels. The first level, which provides the basis for the following work, is the preparation of sectoral typologies, which group countries according to patterns of development of specific industrial systems. This permits the design of group-specific development strategies that take account of the particular needs of the countries of each group and the identification of development actions - technical assistance, policy measures and investments - that are required to implement these strategies. The second level is the preparation of indicative programmes - sectoral development programmes for representative countries from different country groups as determined by the sectoral typology. These are called indicative programmes because they provide a basis not only for developing an industrial sector in a particular country, but also for designing programmes for other countries with a similar development pattern, and development potential for that industrial sector. The third level is the preparation of an integrated sectoral programme of technical assistance and investment projects with supporting policy measures for the development of a specific industrial sector in one country. This work is considerably facilitated and accelerated by the earlier stages of the programme approach, though in principle it can be carried out independently of the first two stages.

In 1989 UNIDO analyzed the development of the agricultural machinery and implements, fertilizer, pesticides and agro-food industrial systems in 50 African countries and prepared sectoral typologies for the first three sectors. These sectoral typologies, which are based on a statistical analysis of a large number of variables relating to all components of an industrial system (natural resources and other factor inputs, production, consumption, trade, related policies, etc.), permitted the classification of countries into groups that show a similar pattern of development and development potential with regard to a specific industrial subsector. On the basis of this analysis, sectoral development strategies were derived for each group of countries, together with the elements for integrated programmes of technical assistance, investments and policy measures necessary to implement the strategies. The sectoral typology for the agricultural machinery and implements industry identified six distinct development patterns, the one for fertilizers identified ten patterns and the pesticides typology identified nine. Group-specific development strategies and sets of actions for implementing them have been derived for each development pattern.

Building and expanding on the results of the sectoral typologies, further analysis of representative countries from priority groups is being carried out that is producing sectoral development programmes with integrated packages of technical assistance and investment projects. These studies represent a cost-effective method of programming technical assistance, especially since the results are cumulative and the experience gained in

programming countries facilitates and accelerates the programming of other countries with a similar sectoral development pattern. They are being carried out in priority sectors for African countries: 24 were initiated in 1989 and another 30 are planned for 1990-1991. Preliminary results of indicative programmes in Africa have identified potential technical assistance and investment projects as indicated below:

<u>Subsector</u>	<u>No of countries</u>	<u>Technical assistance</u> 000 US\$	<u>Investments</u> 000 US\$
Agricultural Machinery and Implements Industrial System	2	450	500
Agrofood Industrial System	3	1,800	45,000
Fertilizer Industrial System	2	8,000	
Pesticides Industrial System	1	50	3,400
Fisheries Industrial System	5	7,100	49,000

The sectoral typologies, indicative programmes and integrated sectoral development programmes described above can be used by Governments and UNIDO in taking decisions regarding industrial development and for approaching donors and potential investors. Thus, they contribute to the basis for programming the second Industrial Development Decade for Africa.

Further information about the programme approach and its potential applications to programming technical assistance and investments can be obtained by contacting the Programme Development Support Unit, UNIDO, Vienna.

ANNEX III

Proposals for an industrial investment promotion programme in the context of the second Industrial Development Decade for Africa

The function of the programme is to help African countries, within the framework of their policies and priorities, to increase the industrial production of the private and public sectors through all forms of industrial and commercial joint ventures between sponsors of African industrial investment projects and foreign partners. For this purpose, the resources required for establishing projects in finance, marketing, technology, management, etc. need to be mobilized. The intention would be for the programme to intervene both with institutions responsible for promoting industrial investments in these countries and with entrepreneurs wishing to develop industrial investment projects on a partnership basis.

1. PROBLEMS CONTEMPLATED

This programme responds to two major problems in Africa:

- Strengthening of the effectiveness of industrial investment promotion institutions in Africa;
- The difficulty, in the current world economic and financial context, of attracting investments and entrepreneurs to Africa, although this is one of the only solutions for dealing with the economic, financial and social crisis through which the region is passing (disinvestment, joblessness, financial and economic crises, etc.).

A special effort should be made to attempt to limit the trend towards disinvestment in Africa. It is intended for the programme to establish an assistance strategy designed to ensure that the industrial investment projects promoted are of better quality, that the sponsors are better prepared for the world of business and industry and that institutions are more effective in terms of identification and promotion of investments in their countries.

2. OBJECTIVES AND RESULTS

- I.1. To prepare a very precise diagnostic balance-sheet of the actions required to make these institutes, agencies and industrial investment promotion offices in Africa more effective and to formulate recommendations to enable these institutions to encourage a better investment climate in their countries (revision of investors' guides, training in communication techniques for promoting their countries' image abroad and for receiving and assisting potential foreign investors, increasing the awareness of banking and financial institutions regarding promotion efforts undertaken, etc.).
- I.2. To train staff of these offices, on the basis of real cases, in more effective techniques for identifying, formulating, evaluating and

promoting industrial investment projects (in particular development of the use of the project profiles entitled "How to start manufacturing industries", training in the use of appropriate software for project pre-appraisal (PROPSPIN), training in promotion techniques based on real cases in close co-operation with the Investment Promotion Services, in particular through the delegates programme, etc.).

II. Assistance to African industrialists wishing to implement industrial investment projects on a partnership basis:

- II.1. To identify industrial sectors which could attract foreign investors (analysis of niches giving prospects for entry into markets in the industrialized countries and local and/or regional markets, selection of the relevant technological routes for Africa, etc.).
- II.2. To identify, formulate, prepare, promote and follow up industrial investment projects in the context of a preferably sectoral approach so as to enhance the quality, rather than increasing the quantity, of projects and their sponsors:
- Identification of investment projects and their sponsors in selected market niches;
 - Preparation of projects so as to ensure that they correspond to demand on the part of potential partners (detailed information on markets, sponsors and their financial standing, etc.);
 - Promotion of projects in particular through local investment promotion offices and the UNIDO Investment Promotion Services;
 - Organization of industrial investment project promotion forums so that selected sponsors can negotiate projects with potential partners who have been identified and selected in advance, and promotion of participation in these forums by African sponsors;
 - Financing of travel by African sponsors in industrialized countries to negotiate with potential partners and visit their enterprises, etc.;
 - Assistance to African sponsors in finalizing partnership agreements, including assistance in the legal and financial establishment of projects and carrying out of pre-investment studies required for the conclusion of joint venture agreements.

With a view to maximum effectiveness, and in order to avoid duplication of efforts undertaken in Africa in regard to the activities mentioned above, it is essential that these activities should be carried out in close co-ordination and co-operation with other multilateral and/or bilateral development institutions.

ANNEX IV

**UNIDO strategic management concept
to support the industrial development in Africa**

Strategic management of industrial development is an action-oriented approach to support the restructuring and development of an industrial system in the context of the programmes of reforms initiated by African countries to improve the situation and management of their economies. 1/ This approach is based on a system of co-operation between the Government and the public and private actors operating in the industrial sector.

The overall objective of the strategic management approach to the industrialization process is the development of an efficient and competitive industrial system, which will contribute to the overall modernization and growth of the economy. The main features of this approach are as follows:

- 1) It focuses on the formulation and implementation of strategies and action programmes for the restructuring or development of specific industrial subsystems which offer opportunities for efficient and competitive industrial activities. 2/ The action programme aims at improving the organization and functioning of the industrial subsystem, in particular, at developing new industries; expanding/restructuring existing industries, and developing the required technological, marketing, managerial and other capacities.
- 2) The strategies and action programmes are formulated and monitored by strategic consultative groups which are established for each industrial subsystem. These include the key public and private actors operating in the subsystem: industrialists, suppliers, distributors and financial, technology and training institutions.
- 3) The Government, with, if necessary, the technical and financial assistance of donor countries and institutions, can support the operators of each industrial subsystem in the implementation of their strategies and action programmes with specific measures and policies. This Government supporting programme should, however, be linked with, and monitored in relation to, the realization of specific performance targets and be consistent with the overall framework of macro-economic and sectoral objectives and policies.

1/ This type of approach has been developed by UNIDO - or is just about to be developed - in Burkina Faso, Cameroon, Congo, Côte d'Ivoire, Guinea, Madagascar, Niger, Nigeria, Senegal and Zaire.

2/ An industrial subsystem is a network of productive and service activities which develops around a basic resource and/or a final market and/or a technology. The subsystem includes not only the industrial activities but also all the supporting services (supply, distribution and marketing, transport, financing, development or technology and training).

The basic organizational framework supporting the strategic management of the industrialization process includes three interrelated organization systems:

- 1) A technical support and information system, usually based at the ministry of industry and working in close co-operation with representatives of the actors operating in the industrial sector and with the other ministries concerned. Its main responsibilities are to assist in the identification and diagnosis of the key industrial subsystems, in the organization of strategic consultative groups, in the preparation and implementation of the strategies and action programmes by the strategic consultative groups and in the preparation and monitoring of the Government supporting policies and measures.
- 2) An intergovernmental decision-making system for the selection of industrial subsystems to be included in the strategic management process and for the approval and monitoring of the programmes of policies and measures to support the implementation of the strategies and action programmes for the restructuring and development of the selected industrial subsystems.
- 3) A consultative system between the Government and the representatives of the actors operating in the industrial sector to review regularly the performance and development of the industrial sector.

Further information on the strategic management concept and its applications can be obtained from the Industrial Planning Branch, UNIDO, Vienna.

ANNEX V

Direct support to industry under trust fund arrangements:

the seed money approach

One aim of the special trust fund scheme is to have a financing mechanism that enables UNIDO to respond promptly and efficiently to the needs of industrial enterprises (public, private, co-operative, or mixed) in the developing countries - needs that are not easily met by the traditional sources of financing, which, in any case, cannot fully satisfy the demand from the developing countries for UNIDO services.

Conventional funding mechanisms are geared more to serving Governments of developing countries and their own institutions rather than responding to the critical and urgent needs of operating companies and industrial plants in the manufacturing sector. In general, multilateral funds cannot be given directly to private entrepreneurs in view of their profit-making activities. Such funds may, however, be used to support the development of the private industrial sector indirectly, thus helping to bring about changes in the infrastructure that make the economic environment more favourable. Very often the grants available are too small in relation to the size of inputs required to solve the problems of individual industrial plants. The long lead times necessary for gaining access to multilateral grant aid often compel even parastatal or public sector companies to seek assistance from alternative sources.

Many companies in the industrial countries request UNIDO to be their reliable and dedicated partner, free from commercial pressure and profit motive, to provide them with sound and impartial technical advice and assist them in obtaining the goods and services that they require at substantial savings of money, time and trouble. They find the worldwide UNIDO network of contacts with suppliers, vendors and contractors most beneficial to them, and the long experience and wide perspective of UNIDO in industrial development problems relevant to their needs.

Another aim of the special trust fund scheme is to provide useful services to development finance institutions (national, regional or international) and to governmental or non-governmental donor agencies, particularly in the implementation of programmes and projects related to the private sector or to certain priority development objectives.

In the case of the poorest countries, mainly the LDCs, private promoters do not always have the necessary financial resources to support the whole project development cycle. In particular, it usually proves very difficult for such promoters to secure funding for pre-investment studies for their projects. This has led a number of Governments to make arrangements or establish schemes aimed at supporting private promoters in financing, through UNIDO, the required pre-investment activities for their industrial investment projects. Such funding is based on the seed money concept, which has been extensively used by countries such as Denmark, Japan, Canada, Korea, and some private enterprises from developed countries, to assist private enterprises from developing countries in the design and development of industrial investment projects.

Better and closer working relations with companies and industry associations (e.g. chambers of commerce, federations of industry, etc.) in the developed countries have resulted in UNIDO obtaining seed money for joint project identification, development and formulation work as well as offers of experts and other facilities (e.g. training, testing, analyses, etc.) free of charge or at reduced rates. The number of companies that have come to UNIDO to demonstrate their capabilities and specializations has also increased sharply in the last two years. A wealth of technical information and many concrete project ideas have flowed from these companies to UNIDO to be used in designing better projects.

Several world-renowned companies, such as Bechtel of the United States of America, SNC of Canada, Energoprojekt of Yugoslavia and Ishikawajima-Harima Heavy Industries Co. Ltd. of Japan, have concluded stand-by agreements with UNIDO for provision of expert and other services at short notice. Among those that have established trust fund projects for project identification and formulation are the Danish Federation of Industries, the Danish International Development Agency (DANIDA), the Danish Pharmaceutical Industries Association and a number of companies in Canada, Denmark, France, Hungary, Italy, Japan, Poland, Republic of Korea and United States of America. Negotiations are at an advanced stage with many other companies and it is hoped that this list will expand rapidly.

Particular mention is made of the trust fund established by the Engineering Consulting Firms Association of Japan (ECFA) for the development of export industries in the Association of South-East Asian Nations (ASEAN) region. Following the joint UNIDO/ECFA mission to the Philippines and Indonesia, Malaysia and Thailand, a number of projects were identified for further enterprise level co-operation. Encouraging results have also emerged in the agro-industry sector in Africa from projects financed by the Government of Japan. A DANIDA-financed project has been successful in assessing the rehabilitation possibilities of individual plants belonging to various sectors in El Salvador, Nicaragua and the United Republic of Tanzania; plans have been made for similar activities in Cameroon, Congo, Djibouti, Egypt, Maldives and Mozambique.

Further information about UNIDO trust fund arrangements can be obtained from the Special Trust Fund Projects Section, UNIDO, Vienna.

ANNEX VI

**Criteria for selecting industrial core projects
at the national and subregional levels**

I. At the national level

The general criteria for selecting industrial core projects set out below are intended as a guide for African countries when developing their own criteria.

1. Resource-based industries

The project:

- (a) Utilizes local natural resources (raw materials and energy) for primary and secondary processing;
- (b) Meets domestic demand or offers export potential;
- (c) Offers clear scope for the integrated development of an industrial branch or subsector,
- (d) Promotes linkages with other national economic activities, possibly also within the subregion;
- (e) Offers scope for development of appropriate technology, including traditional technologies;
- (f) Results in rehabilitation, rationalization, up-grading and diversification of production units, wherever practical;
- (g) Produces intermediates and parts, components and accessories for existing or planned industries;
- (h) Offers opportunities for employment and training of local manpower;
- (i) Replaces, whenever practical, synthetic materials by natural materials, particularly those that are renewable;
- (j) Contributes to the attainment of self-sufficiency in food, in particular, and to rural development in general;
- (k) Provides multiplier effects that promote not only national but also subregional integration.

2. Engineering-based industries

The project:

- (a) Meets the repair and maintenance requirements of industry and other economic activities;
- (b) Performs primary and secondary metal transformation, such as production of metal castings, hardware, fixtures and fittings;
- (c) Produces parts and components for the manufacture of equipment and machinery for food and agricultural production and processing, transport and communications, as well as energy generation and transmission;
- (d) Develops basic support facilities such as foundries, forges, machine shops, tool rooms, facilities for heat treatment, metal fabrication, metal casting and product testing;

- (e) Provides linkage to and fills production gaps in the engineering subsector and support services, such as product, machinery and plant design and industrial engineering;
- (f) Reduces the country's reliance on external industrial factor inputs (spare parts, components, accessories etc.);
- (h) Contributes to the training of operators.

II. At the subregional level

For an industrial project to qualify as a multinational or subregional core project, it should meet all of the basic requirements in group 1 below and one or more additional requirements in group 2.

1. Basic requirements

The project:

- (a) Provides inputs into the priority sectors spelled out in the Lagos Plan of Action and the Final Act of Lagos, i.e. food, transport and communications and energy;
- (b) Provides effective integration and linkages with other industrial and economic activities and infrastructures in the subregion;
- (c) Utilizes and upgrades, to the maximum extent possible, African natural resources (raw materials and energy) so as to benefit, first, the subregion, second, other African countries and third, non-African countries;
- (d) Produces intermediates for further processing or fabricating in established or planned industries, or produces engineering goods, particularly those related to food production and processing, building materials, textiles, energy, transport and mining;
- (e) Caters, first and foremost, directly or indirectly, to the basic needs of the peoples in the subregion and, if required, other African countries;
- (f) Involves (i) economies of scale, (ii) complex technology or upgrading of technology, (iii) large investment and (iv) market(s) beyond the reach of individual countries in the subregion;
- (g) Offers scope for co-operation, especially among the African countries, in long-term supply and purchase arrangements for raw materials, intermediates and final products; subcontracting; barter; equity share holding etc.;
- (h) Contributes to reducing the region's heavy reliance on external factor inputs.

2. Additional requirements

The project:

- (a) Offers actual or potential comparative advantage(s) over a similar project(s) in other groups of countries (African and non-African), particularly in respect of raw materials, energy and the infrastructure required;

- (b) Complements a related project(s) or an existing production unit(s) in the subregion;
- (c) Earns foreign exchange through the export of its products and includes the upgrading of raw materials;
- (d) Results in rehabilitation and rationalization of an existing production unit(s);
- (e) Replaces, whenever practical, synthetic materials by natural materials, particularly those that are renewable.