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Follow-up Subregional Meeting on the  
Promotion of Intra-African Industrial Co-operation  
within the Framework of the Industrial  
Development Decade for Africa (IDDA)\*

Tangier, Morocco, 30 May - 3 June 1988

**REVISED INTEGRATED INDUSTRIAL PROMOTION PROGRAMME  
FOR THE NORTH AFRICAN SUBREGION\*\***

Prepared by  
the UNIDO Secretariat

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\* This meeting is being organized by UNIDO, in co-operation with the North African MULPOC Office of the United Nations Economic Commission for Africa (ECA) at Tangier, the Arab Industrial Development Organization (AIDO) and the Government of Morocco.

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## INTRODUCTION

### Objective of the report

1. This document was initially prepared as a basis for discussion at the follow-up subregional meeting on the promotion of intra-African industrial co-operation within the framework of the Industrial Development Decade for Africa (IDDA). It was subsequently amended in the light of the discussions held with the officials responsible for co-operation and industrial development in the various countries in the subregion and the Arab Industrial Development Organization (AIDO) and in the light of discussions at the subregional meeting.

### Scope and contents of the report

2. The first chapter presents background information on industrial co-operation in the subregion. The second chapter describes the initial integrated industrial promotion programme and projects retained at the subregional meeting held at Tunis (Tunisia) in March 1984. The third chapter assesses the current status of implementation of that programme, including an analysis of the problems encountered. The fourth chapter outlines a revised integrated industrial promotion programme drawn up during the follow-up subregional meeting held at Tangier, Morocco, 30 May - 3 June 1988, while a strategy for accelerating the implementation of the proposed revised programme is suggested in the fifth chapter.

## CHAPTER I

### INDUSTRIAL CO-OPERATION IN THE SUBREGION

#### Historical background

3. The North African subregion comprises six countries: Algeria, Egypt, Libyan Arab Jamahiriya, Morocco, the Sudan and Tunisia<sup>1/</sup>. Its population (excluding Mauritania) totals some 131 million (approximately 30 per cent of total Africa), with forecasts of some 136 million by 1990, and 189 million by the year 2000. The population in the member countries in 1986 was: Algeria 22.6 million, Egypt 54 million, Libyan Arab Jamahiriya 3.9 million, Morocco 23.0 million, the Sudan 20 million and Tunisia 7.4 million. The gross domestic product (GDP) of the subregion (41 per cent of total Africa) and its rate of growth are the highest in Africa, while the level of both infrastructure and industry is well above the average for the whole region. The subregion also leads Africa in terms of trade volume and growth.

4. The predominant activities of the countries in the subregion are in the agricultural sector, involving the production of cotton, olives, citrus fruits, sugar cane and wheat, as well as fishing, employing some 50 per cent of the labour force. Some countries rely on the export of one major cash crop, while others have a wider range. Still others, though predominantly agricultural, depend heavily on the export of mineral products for foreign exchange revenue. The latter group includes Morocco (phosphates) and Algeria

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<sup>1/</sup> Although not part of the North African subregion as defined by the United Nations system, Mauritania is, by virtue of its close geographical, political and economic links with the countries of the subregion, especially within the context of the Maghreb co-operation, considered an integral part of the subregion.

and Libyan Arab Jamahiriya (oil). Other resource endowments include manganese, copper, lead and iron ore. The countries depend on external sources for most factor inputs such as capital goods, intermediate goods, technology, finance and services. In summary, the subregion's economic vulnerability stems from its dependence not only on the export of a limited number of primary commodities whose prices are determined externally, but also on the import of increasingly costly industrial factor inputs. Over the past two years, however, both economic and structural reforms have been introduced by many countries in the subregion, thus leading to an upsurge in industrial activity.

#### Industrial structure of the subregion

5. The level of industrial development in the subregion, as a whole, is the highest in Africa. Some of the countries in the subregion have established major core industries (Algeria, Egypt, Tunisia and Libyan Arab Jamahiriya); and others have developed a wide variety of light industries (Tunisia, Algeria, Morocco and the Sudan). The countries in the subregion are endowed, for example, with a wide range of important resources, notably agricultural, water, mineral, energy and human resources, which provide a sound base for self-sufficient industries and self-sustained industrialization in the subregion, especially if those resources are pooled together. In this connection, the lack of proper co-ordination among the countries in subregion resulting in the development of similar industries in several countries despite a limited market, has given rise to high production costs.

6. Notable achievements in industrial development notwithstanding, many of the countries still rely on agriculture as their main source of foreign currency (Morocco, Sudan and Tunisia) and employment (it employs more than 50 per cent of the available manpower). However, the lack of attention paid to this sector is precipitating its decline, and the economic statistics of the countries in the subregion indicate that the contribution of agriculture to the gross domestic product is declining as a result of increasing rural-urban migration. Between 1965 and 1983 this rate of decline which varied from one country to another ranged between 10 and 60 per cent. Measures are being taken to check the exodus from rural areas by providing farmers with the supplies they require (pesticides, machinery and fertilizers) and by integrating industry and agriculture.

#### Industrialization strategies and policies

7. The countries in the subregion have adopted and established different political and economic systems. Some of them have opted for a planned economy, others for a liberal economy. However, regardless of the current economic and political system, the countries of the subregion use the "plan" as a forecasting and monitoring tool for periods which vary, depending on the country and the stage of development, between three and five years.

8. Practically all the countries of the subregion have acquired experience in all the priority areas indicated in the programme for the Decade, notably: iron and steel and metallurgical industries (Egypt, Algeria and Tunisia); engineering industry (Algeria, Egypt, Tunisia and Morocco); electrical industry (Algeria, Egypt, Tunisia and Morocco); chemical industry (Algeria, Tunisia, Egypt and Morocco); energy-related industries (all countries); textile industry (all countries); forestry industry (the Sudan); building materials industry (all countries); agro-food industry (Algeria, Tunisia, Morocco, Egypt and the Sudan); and fish-processing industry (Morocco).

9. Looking at the level of industrial development achieved by the countries of the subregion, it would appear post facto that the industrialization strategy adopted by the countries has generally focused on resource-based industrialization, import substitution, export-orientation and the manufacture of capital goods. The industrialization policies pursued by the respective countries in implementing their industrial development strategies have varied considerably, depending on the socio-economic environment, national priorities and the scope of policy instruments suited to local systems and infrastructure as well as available natural resources.

10. In Algeria, for example, emphasis has been placed on the iron and steel, engineering, metallurgical, mechanical, electrical and electronics, chemicals and petrochemicals industries, along with the associated engineering consultancy and training services and facilities. In Egypt, on the other hand, emphasis appears to have been placed on engineering industries including transport equipment, and heavy industries such as iron and steel, aluminium, metallurgical, chemical industries, and spinning and weaving industry, agro-industries and fishing and fish-processing industry, along with the support services required for design, research and development, training and testing facilities. In the case of Sudan, industrialization has been principally directed towards agro- and agro-related industries along with light and consumer goods industries, with a relatively weak services sector.

11. In Morocco and Tunisia, the focus appears to have been on light and consumer goods industries to meet local needs, as well as on promoting and diversifying the export of local products. Both countries have good support services in the fields of industrial training, consultancy services and product design and development, especially for light and handicrafts industries. In the Libyan Arab Jamahiriya, industrialization policies and strategies appear to have concentrated on oil and gas-based industries, natural resource-based industries, iron and steel, import substitution and consumer items. The support services sector is still at an early stage of development.

12. The countries in the subregion have come to realize that their domestic markets are too small to be able to support the broad range of industries that characterize a modern economy. This, coupled with the need to develop, was the driving force behind the creation of intergovernmental economic organizations, such as AIDO which promotes industrial co-operation among the countries of the subregion. Faced with deteriorating terms of trade, chronic balance of payment deficits, enormous debt burdens, and an increasingly difficult international economic environment, the countries in the subregion recognized the potential offered by collective self-reliance as a means of ensuring rapid socio-economic development. Furthermore, industrial co-operation at the subregional level would assist in overcoming those economic constraints upon industrialization that stem from limited markets and financial resources, and the fact that individual countries do not have all the technological and manpower capabilities or all the raw material inputs needed to establish certain industries.

13. Similarly, industrial co-operation would also ensure raw material producers in the subregion more liberal access to the larger subregional market, thus making for the optimal utilization of the mineral and other natural resources and installed industrial capacities in the individual countries. It would also lead to subregional economic integration and the achievement of an increasing measure of self-sufficient and self-sustained development, key features of the programme for the Decade.

14. Industrial co-operation has been greatly enhanced by various co-operation agreements among the countries of the subregion. Some of these co-operation agreements which include joint economic committees which meet periodically (once or twice a year) to examine and promote the areas of co-operation are a result of the dynamism of the Maghreb co-operation principle, which has led to the identification of several joint projects and programmes within the framework of studies undertaken by the Maghreb Industrial Studies Centre (CEIM) in co-operation with UNIDO. These joint committees play a fundamental role in the absence of intergovernmental organizations in this field (except for AIDO). Through these committees, important decisions have been taken on joint projects, thereby facilitating their implementation. Their establishment has led to increasing integration and complementarity between the countries, an area which needs to be exploited to the maximum in order to establish a homogeneous bloc at the subregional level. The committees have not limited themselves to promoting mutual relations. They are also responsible for investigating ways and means of making institutional procedures (tariff, customs, financial and other procedures) more flexible; encouraging the movement of goods and persons between the countries; increasing trade; promoting joint training programmes and projects; and the mobilization of funds for joint projects. In this connection, the role of standardization and quality control as a means of increasing subregional trade and integration, as well as facilitating the penetration of external markets was acquiring increased importance, along with the Arab Organization for Standardization and Metrology (ASMO).

15. Despite the differences between countries, co-operation in the subregion has increased considerably in recent years, primarily on a bilateral basis. Examination of the agreements signed between countries indicates that ties have been developed and that the movement of products has increased. Examination of progress made in the initial programme shows that, four years later, five investment projects have already been completed, one is under implementation and six are still being studied. Two other projects have been withdrawn and five suspended. An analysis of the success enjoyed in industrial co-operation in the subregion indicates that this has been largely due to the good political and economic relations between the countries that have undertaken co-operation activities; a strong political will to achieve economic integration; the establishment of effective mechanisms for project development; the mutuality of interest and complementarity of the resources and economies of the co-operating countries.

#### The Industrial Development Decade for Africa (IDDA)

16. The Lagos Plan of Action<sup>2/</sup> points out in its preamble that, over the past 25 years, Africa has failed to achieve a significant growth rate or a satisfactory standard of general welfare. Indeed, 27 African countries are classified by the United Nations as being among the "least developed", out of a world total of 41, and 20 of the 33 countries classified by the World Bank as "low-income" developing countries are in Africa. It is therefore necessary for the African countries to join forces and apply themselves to the

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<sup>2/</sup> OAU - Lagos Plan of Action for the Economic Development of Africa (1980-2000).



development of intra-African economic co-operation, especially in the industrial sector. The will to do so is amply expressed in the Monrovia Declaration by the Heads of State and Government of OAU in July 1979 as well as the Lagos Plan of Action and the Final Act of Lagos in April 1980.

17. Industry is given a major role in the Lagos Plan of Action, confirming the commitment to change the existing economic structure, to meet the basic needs of the African peoples through the exploitation of their own natural resources and to establish an industrial base for the development of other economic sectors. The Lagos Plan of Action sets both qualitative and quantitative targets for the region, such as a share of at least 1.4 per cent of world industrial production by 1990 and self-sufficiency in the areas of food, building materials, clothing and energy. Furthermore, under the Final Act of Lagos, the industrial sector has been selected as one of the priority sectors for subregional and regional integration during the current decade.

18. With the proclamation of the 1980s as the Industrial Development Decade for Africa, both the United Nations and the OAU Heads of State and Government wished to emphasize the importance of industrial development as a means of attaining rapid economic growth, overall development and a better standard of living in Africa. The Programme for the Decade, adopted by the African Ministers of Industry and endorsed by the OAU Heads of State and the legislative bodies of the ECA and UNIDO, is based on the principle of self-reliance and self-sustained development. It presumes that the necessary initiative and stimuli must emanate, first and foremost, from within each country or subregion so as to form a solid base on which self-reliant and self-sustaining economic growth can be fostered through an integrated development strategy.

19. The main features of the programme include the identification of key requirements at both the national and subregional levels, and the effective exploitation, processing and use of local natural resources on the basis of subregional co-operation and an integrated development strategy. Emphasis is also placed on the methodical planning of development activities, integrating them into a subregional and regional approach and strengthening links between industry and the other sectors. Intra-African co-operation being indispensable to the self-sufficient and self-sustained development of Africa, emphasis is placed on the need to: define sectoral policies and programmes covering strategic branches of industry; identify major industrial projects of interest to the countries of the region or subregion; and to strengthen or establish institutions in the subregion or region aimed at promoting industrial integration.

20. The complexity of the challenge inherent in such a programme demands determination, especially at the national level, as the degree of success depends ultimately on the countries themselves. It also depends on an integrated industrial development strategy that is linked to other sectors of the economy and implemented in concert with national development plans and aspirations. Implementation of the programme presumes greater and effective mobilization of the countries' resources, closer subregional and regional co-operation, especially in matters relating to trade, transportation, technology and skills, and substantial bilateral or multilateral assistance from countries outside the region.

21. At the national level, the countries have to identify core industrial and support projects as defined in the programme for the Decade, and pay attention to the development of physical infrastructure, institutional mechanisms,

skills, technology and raw materials as well as other local inputs. Other priority actions include detailed assessment of the financial requirements and the establishment of sectoral linkages. At the subregional level, it is essential to work out a programme of industrial complementarity of core projects based on resource endowment factors and joint participation in order to optimize limited investment resources and enlarge markets.

22. To attain this objective, it is essential to identify core industrial projects which can lead to the establishment of multinational industrial enterprises involving two or more countries. Thus, an initial industrial promotion programme was drawn up for each of the subregions. Agreement was reached on the programme for North Africa at the meeting held at Tunis (Tunisia) from 7 to 10 March 1984. The establishment of an information system would also facilitate intra-African co-operation especially in the fields of training, energy, trade harmonization and the elimination of trade barriers. Above all, relevant existing subregional institutions need to be strengthened in order to foster industrial co-operation at the subregional level and enhance the industrial activities of the national institutions.

## CHAPTER II

### INITIAL INTEGRATED INDUSTRIAL PROMOTION PROGRAMME FOR NORTH AFRICA

23. The advent of the Decade gave fresh impetus to subregional co-operation. In response to the need to promote subregional co-operation, a group of experts met at Tunis, Tunisia, from 7 to 10 March 1984. The Meeting was organized by UNIDO, in co-operation with OAU, ECA, AIDO and the Government of the host country. The experts drew up an initial integrated industrial promotion programme (ID/WG.415/3/Rev.1) and considered modalities for implementing the projects selected.

24. In addition to representatives of the Member States of the subregion, the meeting was also attended by the representatives of AIDO, the Arab Federation for Food Industries (AFFI), the Arab League Educational, Cultural and Scientific Organization (ALECSO), the Arab Standardization and Metrology Organization (ASMO), African Training and Research Centre in Administration for Development (CAFRAD), the Resident Representative of UNDP and a number of representatives of Tunisian enterprises and institutions.

#### Priority core subsectors

25. The choice of projects to be included in the subregional programme was dictated by the need to accord priority to those directly or indirectly contributing to the subregion's self-sufficiency in the production of foodstuffs and those which would stimulate upstream and downstream economic activity. Accordingly, and in order to secure stronger political support, the experts decided to centre the strategy for the subregion around the agro-industrial or agriculture-related projects. The implication of such a strategy was that the ancillary subsectors supplying the production inputs required for those projects would have to be accorded the same degree of priority. The experts thus identified the following main subsectors for inclusion in the integrated programme:<sup>3/</sup>

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<sup>3/</sup> The sectors are not listed in order of priority for it would be difficult to identify priorities common to all the countries.

(a) Agro-industries and agro-based industries

26. The development of agro-based industries is critical to the subregion's attainment of self-sufficiency in food production, a priority among the priorities in the Lagos Plan of Action. Their development would greatly help to reduce post-harvest losses, increase food availability and contribute to food security in the subregion. The development of this subsector would also help to reduce imports, increase the "value added" of raw materials, augment export earnings, raise employment levels, and improve incomes. It would also increase opportunities for investment in agriculture (farming and stock breeding) and associated processing industries, as well as stimulate the development of allied subsectors, such as engineering and energy. The North African coastal waters, especially those of Morocco, are rich in halieutic resources. At present, a significant portion of its is consumed locally, thereby helping to combat protein deficiencies, and the rest is exported. The processing of the large catch contribute to the improvement of local technical skills and job creation.

27. In connection with agro-related industries, special mention needs to be made of the textile industry which produces one of Africa's most basic needs, clothing. It is also one of the four industrial subsectors in which self-sufficiency is to be achieved during the decade 1980-1990. The development of the textile industry will permit the satisfaction of local needs, import substitution and export promotion. The countries in the subregion need to increase substantially their production of raw materials, especially cotton and man-made fibres, instead of importing them from countries outside the region. Current trends in textile technology are likely to induce rapid structural changes, as the industry becomes increasingly capital-intensive and technologically sophisticated. At present, many of the countries have a fairly well-developed textile industry, and some of them (Morocco and Tunisia) are already exploring potential markets for their surpluses. However, local resources (wool, cotton and synthetic fibres) will have to be substituted for raw material imports.

(b) Metallurgical industry

26 The metallurgical industry provides linkage upstream to industries processing raw materials (mining, energy and water), and downstream to metalworking and engineering subsectors; it is basic to the industrialization process. The manufacture of metal consumer goods and equipment in the subregion requires accelerated growth of the intermediate industries providing such inputs as iron and steel, aluminium and other metallurgical products. These, in turn, depend on the exploitation of the vast mineral resources in the subregion, in particular iron ore, copper and lead. At present, some of these minerals are processed in the subregion, while others are exported to the developed countries as raw or semifinished products. The development of metallurgical industries in the subregion would make for the creation of vertically integrated industries from mining through refining to fabrication.

29. Many countries in the subregion, such as Egypt, Algeria, Morocco and Tunisia, have developed metal-processing industries such as iron and steel complexes. In spite of this, the subregion still falls short of fully meeting its requirements. Some countries, such as Egypt, Algeria and Tunisia, have made efforts to use the semi-manufactured products produced by these industries. Such initiatives need to be expanded and strengthened with

special emphasis on complementarity between the economies of the various countries.

(c) Engineering industries

30. The further integrated development of engineering industries in the subregion, such as the metalworking, mechanical, electrical and electronic branches, will ensure the manufacture of basic equipment and machine tools, as well as intermediate and capital goods for use in food production and in such priority subsectors as the agro-based, building materials and metallurgical industries. It will also contribute to the promotion of the automotive industry in the subregion. Engineering industries, through such facilities as foundries, forging and heat-treatment shops, tool rooms, metal fabrication shops, machine shops and metal-coating shops, ensure the supply of spare parts, components and accessories to all sectors of the economy. With the development of engineering industries in the subregion, natural resources (basic metals from ores) would be increasingly utilized, capital formation would be accelerated, and the production of essential parts, machinery and equipment that are currently imported would be promoted. Through this effective form of import substitution, foreign exchange would be saved for other economic activities, while development of the subsector would also foster science and technology, including research and development activities.

31. The engineering subsector has generally developed in close conjunction with the metallurgical industry subsector. Thus, the same countries producing iron and steel also have a well-developed engineering sector, especially Algeria and Egypt whose achievements in this area have been considerable. Besides the establishment of the basic production complexes (production of vehicles, tractors, bicycles and motorcycles and machine tools) this sector calls for an extensive industrial fabric covering, in particular, the production of spare parts and accessories. Tunisia and Morocco have indeed made notable efforts in setting up many small-scale industries for this purpose. However, the subregion as a whole has yet to become self-sufficient in this area as it still relies on imports to meet much of its demand for spare parts.

(d) Chemical industry

32. Chemical industries provide products directly related to the satisfaction of basic needs, primarily food and health. As mentioned earlier, the decline in agricultural production and growing populations in the subregion caused an increasing amount of resources to be diverted to food imports (especially cereals), thereby reducing the amount of foreign exchange available for the import of industrial inputs required to assure full utilization of installed capacities. Production in the subregion of essential chemicals such as fertilizers, pesticides, pharmaceuticals and petrochemicals based on domestic resources (natural gas, coal, phosphate, potash, electric energy, etc.) would stimulate the development of agriculture, industry and other sectors, whose viability could not be assured using imported chemical inputs. In this connection, it should be noted that the more advanced the stage of economic development, the more critical the role of the chemical industries and the higher the degree of linkage with other key subsectors and sectors.

33. Despite the availability of raw materials, the production of chemicals in the subregion has only recently been boosted. However, measures have been

taken in a number of countries to increase chemical production and to set up the basic facilities required to cover essential needs, especially for fertilizer, insecticides, pharmaceuticals and petrochemicals (derived from local resources). Egypt, Tunisia, Algeria and Morocco already have a considerable industrial base in this area.

(e) Building materials industry

34. Promotion of the building materials industry in the subregion would contribute to the satisfaction of one of the population's basic needs - housing. It would also contribute to the exploitation of local natural resources and create a solid base for self-sustained industrialization in the subregion. In addition to meeting the requirements of the other sectors and subsectors, the building materials industry also provides inputs to the construction industry which, for its part, is not confined to the construction of dwellings, but contributes to the creation of major infrastructural works, such as dams, irrigation schemes, airports and harbours. The construction industry literally paves the way for the establishment of conditions conducive to socio-economic development. This it achieves not only by providing improved physical facilities, but also by employing a large labour force, thereby generating additional purchasing power and widening the subregional market for the products and services of other subsectors and sectors of the economy.

35. Many of the countries in the subregion have made notable achievements in this sector, and installed capacity is, for certain products such as cement, more than sufficient to cover present needs. Co-operation schemes between certain countries of the subregion, including two joint projects between Algeria and Tunisia, have been initiated in this area. These efforts need to be intensified in order to reduce imports by other countries from outside the subregion.

Resources, infrastructure and services supporting industrial development

Agriculture

36. Although agriculture still remains the major source of employment and in most countries is the major source of foreign exchange revenue, its recent decline has had to be offset by substantial imports of food. Agricultural exports have dropped in some countries and the resultant low level of rural incomes has led to a massive exodus of the young to urban areas. Other factors contributing to the decline of agriculture have been: inadequate attention to the supply of industrial inputs such as fertilizers, pesticides, insecticides and agricultural equipment, as well as the failure to develop industries with forward linkages to agriculture. This situation must be corrected so as to allow a transformation of the present negative linkages between industry and agriculture into positive bonds, thus permitting industry and agriculture to grow together in harmony.

Mineral resources

37. Mining and quarrying are important activities in such countries as Algeria, Egypt and Morocco. Most of these activities are undertaken by national companies in the public sector. In some countries such as Morocco, these minerals are produced mostly for export, and in others such as Algeria

and Egypt they are produced for local processing. The extraction of mineral resources (for example, iron, phosphate, copper, lead and salt) is an important branch of activity in some countries of the subregion such as Algeria, Morocco, Egypt and Tunisia. In all the countries of the subregion, mining operations are an important activity and are run by public enterprises.

### Energy

38. Most of the countries of the subregion (for example, Algeria, Tunisia, Libyan Arab Jamahiriya and Egypt) also produce their own energy, some of them mainly for export. Thus, the subregion is generally self-sufficient in energy. Urban economies depend on commercial sources such as oil, natural gas, and hydroelectricity, and the recent growth in the use of commercial energy has been due to both domestic and industrial expansion in the subregion. Firewood, a traditional source of energy, is still used for cooking in rural areas and by the urban poor.

### Transport and communications

39. The basic transport and communication infrastructure is established in the subregion in that major cities have air or road links: rural networks, however, are poor and hamper development. The railway network is relatively well developed and offers effective transportation of goods at a reasonable cost in the large countries in the subregion such as Egypt and the Sudan. Certain operational problems obtain, such as a lack of locomotives and rolling-stock. All coastal countries in the subregion have harbour facilities - some are overcrowded, others underutilized. Telecommunications services in most countries are comparatively well developed and much is being done to improve them further.

### Mobilization of financial resources

40. Implementing the projects referred to in the subregional programme will call for major investments - a basic factor determining the complete production process, the transfer and choice of technology, product selection, corporate form and, above all, the negotiating position vis-à-vis the outside world. In some countries in the subregion, this problem is aggravated by the oft precarious state of the country's balance of payments, public finances and budgets, as well as the low level of transactions, particularly in the agricultural sector. It would therefore be advisable for Governments and financial institutions in the subregion to mobilize internal and external financial resources and optimize their use through a variety of measures, including fiscal and other policies designed to stimulate savings and investment. These should be matched by such institutional arrangements as the strengthening or establishment of national or subregional industrial development banks.

### Water

41. The subregion can be divided into two groups: those whose water is provided by rivers and those dependent on rainfalls and groundwater supplies. The former group, Egypt and the Sudan, have an abundant supply of water, well managed and distributed by means of dams and canals. The latter group, the remaining countries in the subregion, have water enough to meet short- and medium-term requirements in both the agricultural and industrial sector. That

notwithstanding, further steps are necessary in order to exploit groundwater supplies and construct barrages on wadis in order to be able to satisfy long-term requirements.

#### Trade

42. North African trade is oriented towards countries outside the subregion. However, serious efforts are being made to increase trade between the countries within the subregion and so change the traditional North-South pattern of trade. The Governments in the subregion have placed great emphasis on developing trade within the subregion, and numerous bilateral agreements have been concluded between countries in the subregion to this end. The establishment of a harmonized system of protection at the subregional level would also contribute to the effectiveness of subregional industrial development.

#### Human resources

43. The implementation of the integrated industrial promotion programme, like that of the programme for the Decade, hinges on the development of human resources at various levels in the industrialization process, ranging from policy-makers and industrial entrepreneurs through technologists and technicians to skilled labourers. The subregion has adequate human resources at its disposal, and a number of its vocational training centres as well as technical training institutions, if developed and assisted, could cope with the training needs arising out of those programmes. Furthermore, if appropriately strengthened, these institutes could accept trainees from other subregions. At the same time, the fact that some of the countries in the subregion have a long tradition of labour migration to Europe has contributed to building up skilled labour in the subregion. The promotion of subregional co-operation in the fields of industrial training, consultancy and entrepreneurship is the subject of a second background document (ID/WG.472/4/Rev.1(SPEC.)) prepared for the meeting. Comprehensive proposals for the development of human resources for industrialization in Africa are contained in document ODG.4(SPEC.) available as an additional background document.

#### Technology

44. Establishing the core industries identified in the programme will call for major technological inputs. Consequently, three major considerations apply. First, linking technology to the industrial development of the subregion can only be successful if relevant measures are adopted by Governments: thus, technology policy and planning become important elements. Secondly, the development of technological capabilities in each country is a prerequisite for the selection, acquisition, adaptation, absorption or development of industrial technology. This involves, inter alia, the establishment of technological institutions and the training of industrial and technological manpower. Thirdly, the appropriate choice of technology is of crucial importance, since an inappropriate choice will not only incur unnecessary major expenditures, but it will also distort the pattern of development. Comprehensive proposals for strengthening the scientific and technological capabilities in African countries for industrial development are contained in document ODG.3(SPEC.) available as an additional background document.

### Industrial institutional infrastructure

45. The successful implementation of the subregional programme will require the strengthening of existing industrial institutional mechanisms which have been established in each country to promote joint projects and industrial co-operation. These functions are outlined in the section of the programme devoted to multinational support projects, and a distinction can be made between: (i) those institutions primarily responsible for such activities as the organization of raw material supplies, including energy, the development of factor inputs for production and marketing; and (ii) those performing supplementary services, such as information, banking and insurance, material and product testing, and project preparation.

### Implementation strategy

46. At this point it may be useful to recall some of the critical modalities drawn up at the Tunis meeting for the implementation of the programme. These include the need to:

- Identify clearly priority subsectors or branches. Given the limited resources available, the selection process and the establishment of priorities constitute a sine qua non;
- Carry out detailed pre-investment studies and investment promotion activities so as to permit the mobilization of the investment financing required for the implementation of the projects. In this regard, the role of financial institutions in the funding and/or mobilization of such resources was emphasized;
- Accord priority to projects jointly developed by more than one country in view of their greater political support;
- Agree on an integrated, realistic and well articulated programme to be matched with concrete proposals for implementation;
- Incorporate relevant aspects of the programme in the national development plans and to establish National Co-ordinating Committees, as well as operational focal points to be provided with adequate staff and funds;
- Adopt a short- and long-term approach to the preparation and implementation of the programme;
- Encourage those countries selected to host projects to play an effective leadership role;
- Intensify consultations between co-operating countries as well as with other countries and relevant subregional institutions leading to firm negotiations on each project;
- Encourage the involvement of the private sector; and
- Establish subregional machinery (subregional and subsectoral committees) to monitor and evaluate the implementation of the programme and projects at every stage.



### CHAPTER III

#### ASSESSMENT OF THE IMPLEMENTATION OF THE PROJECTS IN THE INITIAL INTEGRATED INDUSTRIAL PROMOTION PROGRAMME

##### Status of the projects

47. The initial integrated industrial promotion programme for North Africa retained at the subregional meeting in Tunis, in March 1984, comprised 19 investment projects in five core areas and eight support projects covering institutional infrastructure, manpower development and other areas (Annex II provides details on the status of implementation of the initial programme. Column 3 indicates the decisions reached at the Tunis meeting on implementing the projects, while column 4 describes progress achieved since March 1984.)

48. It thus transpires from annex II that several countries and project sponsors have taken a variety of follow-up actions since the Tunis meeting for the implementation of the projects contained in the initial programme. Of the 19 investment projects, five have been completed, one is under implementation, six are still being studied, two have been withdrawn and five suspended.

49. With regard to support projects, it should be noted that countries of the subregion as well as regional and subregional organizations such as UNIDO, AIDO and the ECA MULPOC initiated steps towards implementing some of the support projects contained in the initial programme. Those actions have, however, not resulted in actual implementation of the projects. There is thus a need for more efforts to be made to ensure their implementation in view of their special significance to the subregion and their critical contribution to the implementation of the core projects.

50. An analysis of the causes for success or failure in the execution of the projects reveals that the projects under implementation, largely on a bilateral basis, had already been well prepared before they were proposed for inclusion in the initial programme. The projects in which no further progress has been made, but in which there is still confirmed interest, relate to priority sectors for the countries of the subregion, but their promoters either lack resources or have changed their priorities. The projects postponed to a later date or cancelled were generally no more than ideas at the time of their proposal at the Tunis meeting and have subsequently been seen not to merit any priority. Success in the execution of certain projects was also due to the favourable political and economic relations between the co-operating countries.

##### Constraints upon the implementation of the initial programme

51. On the whole, progress towards the implementation of the initial integrated industrial promotion programme for North Africa can be considered satisfactory. Although encouraging results have been achieved in promoting industrial co-operation in the subregion, these results are clearly inadequate compared to the existing potential. This is largely due to the changing political and economic conditions in the subregion; weaknesses in information channels; rigidities in customs, financial and trade procedures; different guidelines embodied in the development plans and lack of proper co-ordination of the economic development policies and strategies in the countries of the subregion leading to a duplication of production facilities established in the

different countries. These constraints contributed to the slow or lack of progress in the implementation of some of the projects included in the initial programme. Lack of progress on some of the projects was due to the fact that those projects were still at the conceptual stage when they were presented at the Tunis meeting. Little consideration had been given to the exigencies of integration or to the implications and problems of implementation. As a result, those projects were submitted without preliminary studies and adequate data, and no serious consideration was given to their evolution. Furthermore, poor communications between the co-operating countries also constrained project implementation. Moreover, even at the national level, communications and co-ordination between the various ministries and other responsible agencies call for improvement.

#### Constraints at the national level

52. By and large, national, economic and industrial strategies and policies have been heavily influenced by some or all of the following problems:

- Acute shortages of virtually all the necessary imported industrial inputs, partly as a result of foreign exchange constraints;
- Inadequate markets and the inability of industrial products to compete effectively on external markets owing to high costs and quality factors;
- High cost of energy, particularly petroleum;
- A prolonged drought which has curtailed activities in the agricultural sector and destroyed the few local input sources;
- An external debt crisis; and
- Lack of proper co-ordination between the public and private sectors and inefficiency of the public enterprises which all too often reduced output and diminished market adaptability.

53. Even though progress had been made in the implementation of joint projects, some of the strategies and policies that have been adopted by the countries of the subregion bore no direct relation to the initial subregional programme or its objectives. Indeed, many of those policies appeared to be in opposition to the agreed principles of subregional co-operation. However, with the crushing effect of the debt crisis, many of the policies and strategies are fast becoming both corrective and developmental in nature. In almost all the countries, the policies adopted aim at changing the structure of the economy in order to accentuate the importance of agriculture and rural development and shift the industrial sector from import substitution towards a more resource-based orientation. All the countries in the subregion have taken policy measures to attract foreign investment.

54. Experience over the years has shown that the success of such measures does not depend on the magnitude of concessions. On the contrary, the availability of infrastructural facilities, general economic prospects and environment, the degree of profitability of a project per se, and, above all, national stability offer the greater inducement. Concessions in the form of protection can lead to inefficiency and the production of uncompetitive goods. Regrettably, only a few countries have taken bold policy measures to

streamline their public service for more effective performance and drawn up strategies for the training of personnel, particularly management, at all levels.

55. While many countries in the subregion have set up various joint committees and projects in line with the Maghreb co-operation principle, some of the corrective measures being formulated in some of the countries in the subregion do not appear to pay sufficient attention to subregional industrial policies and strategies. There also appears to be a need to strengthen the linkages between industry and other sectors of the economy in the subregion.

56. In connection with the above, it is also to be noted that the current trend is for States to disengage themselves from direct investment in those activities that can be carried out by private operators. A kind of de facto moratorium is thus imposed on the establishment of new public enterprises, and priority is given to reactivating existing projects which analyses show are capable, once reactivated, of yielding satisfactory economic and financial returns.

57. The current economic depression in almost all countries of the subregion has also been the most significant single factor militating against prompt measures promoting subregional industrial projects. For some countries, the funds are very limited. In some countries, national projects are accorded much higher priority in the short term unless the country concerned can be assured of the benefits that it can derive from an integrated subregional programme of this nature.

#### Constraints at the subregional level

58. The most serious constraint encountered by the subregional organizations in the formulation and promotion of subregional projects seems to have been the limitation of financial and human resources. The subregional organizations entrusted with the responsibility for carrying out studies for joint or regional projects were often not accorded the necessary budgetary allocations for that purpose. While the organizations have endeavoured to mobilize financing from donor and funding institutions and bilateral technical assistance bodies, it has not, however, been possible to bring together all the necessary funds. A more serious problem that was also frequently encountered related to the impossibility or difficulty of securing in developed countries appropriate technical partners, so as to effect the requisite transfer of technology (licences, know-how, etc.).

#### Subregional institutional arrangements to promote industrial co-operation

59. At the subregional level, a number of industrial policies and strategies have been adopted under the auspices of the Arab League and AIDO. These relate to priority areas of co-operation and project development, participation in equity, mobilization of the population to promote integration and, finally, development of more specialized programmes concerning technology, training and technical assistance.

60. The structure of the intergovernmental organizations, above all of the joint committees responsible for industrial development, must be strengthened and the resources of their secretariats increased to ensure the effectiveness of their administrative and specialized services. Serious consideration needs

to be given to the establishment of a well-staffed industry department within the secretariats or structures of these organizations. The economic crisis mentioned above has had a severe impact on these intergovernmental organizations because not all the member States have been in a position to fulfil all their financial commitments.

61. Apart from the intergovernmental organizations, there are a number of sectoral or bilateral and multilateral mechanisms which do not have any permanent structure. These mechanisms need to be restructured to eliminate unnecessary bottlenecks, duplication and waste of resources. The creation of a permanent consultative system linking the different joint committees and regional and subregional agencies for the financing of development in North Africa is a step in the right direction.

#### CHAPTER IV

##### REVISED INTEGRATED INDUSTRIAL PROMOTION PROGRAMME

62. The revised programme presented in this chapter was initially prepared on the basis of information obtained during missions fielded by UNIDO to each of the countries in the subregion and revised by the follow-up subregional meeting. This has resulted in the elimination of some of the projects included in the initial programme which are not being accorded priority by the sponsors. Other changes were introduced during the follow-up subregional meeting itself. It is to be noted that most of the investment projects have been fully developed or are at an advanced stage of development. The proposed support projects should in principle bring together a substantial number of countries, unlike the investment projects which are generally bilateral.

63. The presentation used in the initial programme has been retained for the revised programme: the projects are grouped together in subsectors and subprogrammes. In the case of certain projects being studied, there is no information concerning the market, production and costs. This information will be provided later by the promoters, as need be.

##### Selection of core subsectors and core investment projects

64. The priority subsectors identified in the initial integrated industrial promotion programme for the subregion were as follows: agro- and agro-based industries, building materials industry, chemical industry and engineering industries. Priority was also accorded to a number of other factors, such as resources, infrastructure and services supporting industrial development. These included agriculture, natural resources, human resources, technology, industrial financing and institutional support. The projects proposed for inclusion in the revised programme are in line with the above priorities, subsectors and areas.

65. In order to ensure effective execution of the revised integrated industrial promotion programme, it is recommended that only the core subsectors and the areas mentioned in that programme be included. Attainment of targets relating to self-sufficiency and self-sustaining economic development is dependent on the development of those priority core subsectors and areas.

66. In the light of the assessment in Chapter III, it is recommended that future action on the implementation of the projects contained in the revised programme be approached on a priority basis. The core projects may thus be classified in three categories: (i) first priority: implementation in the short term (0-5 years); (ii) second priority: implementation in the medium term (5-10 years); and (iii) third priority: implementation in the long term (more than 10 years). All support projects have been included in the first priority category. While particular attention should be paid to implementing projects accorded first priority, this should not prejudice action by the sponsors of projects in the other two categories.

67. The revised programme contains 13 core projects and six support projects carried over from the initial programme. The basic information regarding each project is given in the project profiles attached as annex III.

## CORE PROJECTS

### Agro- and agro-based industries

#### Food-processing subprogramme

1. Project Profile No.1 (initially project profile No.8):  
Establishment of sugar mills (Sudan)

#### Pulp and paper subprogramme

2. Project Profile No.2 (initially project profile No.9):  
Establishment of a paper factory (Sudan)

#### Textile industry subprogramme

3. Project Profile No.3 (initially project profile No.11):  
Establishment of a spinning mill (Tunisia/Libya)
4. Project Profile No.4 (initially project profile No.12):  
Establishment of a kenaf sack production plant (Sudan)

### Building materials industry

#### Cement and tiles subprogramme

5. Project Profile No.5 (initially project profile No.15):  
Establishment of the Port Sudan cement factory (Sudan)
6. Project Profile No.6 (initially project profile No.16):  
Establishment of a plant to produce white cement (Tunisia)
7. Project Profile No.7 (initially project profile No.17):  
Manufacture of marble tiles (Sudan)

### Chemical industry

#### Basic chemicals subprogramme

8. Project Profile No.8 (initially project profile No.19):  
Establishment of a sheetglass production unit (Sudan/Egypt)

Engineering industry

Agricultural machinery and equipment subprogramme

9. Project Profile No.9 (initially project profile No.1):  
Establishment of tractor assembly plants (Egypt/Sudan)

Road and rail transport subprogramme

10. Project Profile No.10 (initially project profile No.4):  
Establishment of low-category diesel engines manufacturing plant (Tunisia)

Machine tools and allied machinery subprogramme

11. Project Profile No.11 (initially project profile No.5):  
Manufacture of lathes and milling machines (Morocco)
12. Project Profile No.12 (initially project profile No.6):  
Manufacture of woodworking machinery (Tunisia)

Electrical equipment subprogramme

13. Project Profile No.13 (initially project profile No.7):  
Manufacture of refrigerator compressors (AIDO)

NEW CORE PROJECTS

68. During the preparatory missions carried out in the countries of the subregion, information was obtained on the following 29 new projects. That information was reviewed and expanded during the subregional meeting, especially on such aspects as availability of raw materials, energy and physical infrastructure, projected demand by product, market, production capacity and estimated investment. Summary details on each of these projects are given in annex IV.

Agro- and agro-based industries

1. Establishment of textile industries (Libya/Morocco)
2. Establishment of food industries (Libya/Morocco)
3. Establishment of leather industries (Libya/Morocco)
4. Production of vegetable oil (Sudan/Tunisia/Algeria/Morocco/AIDO)
5. Production of fine cotton yarn  
(Sudan/AIDO/Tunisia/Morocco/Algeria/Libya/Iraq/Syria)

Building materials industry

6. Nafta el Oued brickmaking plant (Algeria/Tunisia)

Chemical industry

7. Establishment of pharmaceutical industries (Libya/Morocco)

8. Production of urea nitrate (Libya/Tunisia)
9. Production of phosphate fertilizers (Sudan/Tunisia)
10. Production of nitro-phosphates (Algeria/Tunisia)
11. Production of petrochemical products such as acetic acid, bitumen, base lubricants and transformer oils and monovinylacetates (MVA) (Algeria/Tunisia)
12. Production of chemical products such as synthetic glue, titaniumdioxide, pigments and organic colours, mineral colours and pigments, sodium sulphate and barytine derivatives (Algeria/Tunisia)

Engineering industry

13. Manufacture of household washing machines (Algeria/Libya)
14. Production of passenger cars and utility vehicles (Algeria/Libya)
15. Production of gearboxes for automobiles (Algeria/Libya)
16. Production of high-grade diesel engines for tractors and trucks (Algeria/Libya)
17. Production of light vehicles for desert use (Algeria/Libya)
18. Aluminium complex (electrolytic process) (Algeria/Libya)
19. Production of lorries (Libya/Tunisia)
20. Production of high-tension electrical transformers (Algeria/Tunisia)
21. Construction of metallic structures (Algeria/Tunisia)
22. Manufacture of machinery for sheetmetal work (Algeria/Tunisia)
23. Manufacture of machinery for processing plastics (Algeria/Tunisia)
24. Production of textile machinery (Algeria/Tunisia)
25. Manufacture of gears and reduction gears (Morocco/Tunisia)
26. Industrial forge project (Morocco/Tunisia)
27. Production of thermostats, evaporator sheets, heat exchangers, cooking stoves, micro-motors, control panels, TVs, cassettes, and printed circuits (Algeria/Tunisia)
28. Production of pistons, gudgeon pins, casings, sleeves, bearings and transmission chains (Algeria/Tunisia)

Metallurgical industry

29. A joint steel complex (Algeria/Libya/Mauritania/Morocco)

SUPPORT PROJECTS

Industrial manpower development subprogramme

1. Project Profile No.S1  
Assistance in the development of an industrial training programme
2. Project Profile No.S2  
Improvement of industrial consultancy and management capabilities
3. Project Profile No.S3  
Development of local entrepreneurship (Directory of small-scale industrial project profiles)

Other support projects

4. Project Profile No.S4  
Promotion of the food-processing industry in North Africa
5. Project Profile No.S5  
Upgrading of the Tunisian National Centre for Leather and Footwear into a subregional centre
6. Project Profile No.S6  
African Regional Centres for Genetic Engineering and Biotechnology

NEW SUPPORT PROJECTS

1. Joint Tunisian/Libyan company for industrial maintenance and assembly
2. Study on the promotion of capital goods manufacture in North Africa
3. Technical studies on the promotion of subregional co-operation in the fish-processing industry
4. Technical studies on the promotion of a subregional marine repair and maintenance industry
5. Technical studies related to industrial pollution
6. Subregional consultations on specific sectors

Summary information on each of these projects is given in Annex IV.

**CHAPTER V**

**STRATEGY TO BE ADOPTED TO ACCELERATE IMPLEMENTATION  
OF THE REVISED PROGRAMME**

Measures to be adopted

69. In the plan for the implementation of the initial integrated industrial promotion programme for North Africa, the measures outlined below were recommended for adoption at the national and subregional levels. Moreover, the strategy for accelerating the implementation of the revised programme should take into consideration all those constraints which have prevented the



initial programme from achieving a high rate of implementation. Since those constraints are the responsibility of both the countries themselves and the subregional organizations, the successful fulfilment of the programme will require a series of measures at those two levels. In addition, such co-ordinating organizations as UNIDO and the ECA MULPOC Office for North Africa, which have a catalytic role to play in subregional industrial co-operation, need to intensify their assistance at both the national and subregional levels so as to bring about the implementation of the revised programme.

At the national level

70. It is important to emphasize that the success of the programme will be determined by the actions taken at the national level and by the policies and operational mechanisms adopted by Governments. The actions, most of which are already being carried out by many countries of the subregion, include the following::

- (a) Formal endorsement of the programme and its projects by Government;
- (b) Incorporation of the salient features of the subregional programme and its projects in national industrial development plans, possibly incurring the need to adjust ongoing national industrial development plans;
- (c) Allocation of the human, financial and physical resources needed to implement the projects;
- (d) Strengthening or introducing operational mechanisms (e.g. corporations, companies, commissions) responsible for follow-up, including project definition, pre-investment studies, investment promotion, and project-related consultations with other countries in the subregion;
- (e) Promotion of projects among potential investors and financial institutions;
- (f) If designated lead country, official submission of the project to financing institutions;
- (g) On the basis of profiles for core investment projects, elaboration of detailed pre-investment studies, assisted by ADB, UNIDO and competent local industrial consultancy organizations;
- (h) Improvement of domestic manpower capabilities and institutional capacities needed for the identification, preparation and implementation of projects.

71. The endorsement of programmes and projects by the legislative authorities of subregional organizations is a protracted and quite complicated process. Governments, thus, need to ensure internal co-ordination among the Ministries and organizations concerned in respect of the projects being promoted and maintain, as far as possible, consistency in terms of attendance and representation at meetings of the subregional organizations dealing with industrial co-operation.

72. In the light of the above, the following measures, some of which are already being implemented by the countries of the subregion, are listed

hereunder, simply as a reminder to those countries that have not yet adopted them:

- Any project prepared by a national Government should be jointly endorsed and promoted by both the Ministries responsible for industry and planning and for the submission of official requests to funding agencies;
- A complete file, including the necessary feasibility studies as well as a status report on implementation should be maintained on each project and regularly updated. This would facilitate the provision of information to potential investors and financial institutions interested in the project.

73. The Governments of the subregion, as in other subregions of Africa, also need to involve the private sector, as well as industrial consultancy and engineering organizations more extensively in the formulation and implementation of the projects retained in the subregional programme. A programme for the greater involvement of the private sector, especially national agents of production, planners and financial institutions, needs to be adopted. It is therefore essential that the support projects included in the revised subregional programme are accorded appropriate priority when implementing the programme.

74. Policies and programmes should be adopted with due regard to local conditions on matters relating to:

- (a) The development of local industrial entrepreneurship and indigenization;
- (b) The energy problem as it affects industrialization;
- (c) The current constraints facing the public sector enterprises in most countries of the subregion and their linkage and complementarity with private sector enterprises.

75. It is strongly recommended that National Co-ordinating Committees for the IDDA or UNIDO as well as the Operational Focal Points for the IDDA should be strengthened or established, where they do not exist. Active working contacts should be maintained between these committees and operational focal points and the secretariats of the relevant subregional organizations and joint committees in order to ensure the successful implementation of the subregional programme.

#### At the subregional level

76. The industrial priorities established by AIDO and the ECA MULPOC Office coincide with the priority activities identified for the implementation of the revised integrated industrial promotion programme at the subregional level. These activities include:

- (a) Formal endorsement and implementation of the revised integrated industrial promotion programme by the intergovernmental organizations in the subregion, and inclusion thereof in their subregional development plans and programmes;
- (b) Establishment and/or strengthening of subregional technical and subsectoral committees on a branch-by-branch basis to co-ordinate, monitor and advise Governments on the selection and implementation of multinational projects in each subsector;

- (c) Provision by those intergovernmental committees of advice to Governments on the preparation, implementation, management and monitoring of the multinational industrial projects, including the definition of:
- (i) The broad principles governing the relationship among the parties and specifying the co-operation arrangements in the areas of industrial production, and trade in industrial raw materials and products;
  - (ii) The policies and supporting measures which the Governments concerned should pursue;
  - (iii) Operational principles and measures, including mutual benefits or equitable treatment;
  - (iv) Joint ventures involving such bodies as multinational corporations in the countries of the subregion, or member countries of the subregion and other subregions and regions, or statutory corporations and other enterprises;
  - (v) Co-production and specialization, including subcontracting and marketing, as an arrangement of particular importance to engineering-based core industries;
  - (vi) Joint acquisition of technology and the mobilization of financing resources;
  - (vii) Standardization and quality control.
- (d) Preparation by the subregional intergovernmental organizations of the subsectoral studies included in the revised programme with a view to identifying clusters of economically viable projects integrated with other industrial branches and the remainder of the economy;
- (e) Preparation by subregional intergovernmental organizations of rehabilitation studies on priority projects whose reactivation in the context of the subregional programme might prove economically and financially viable;
- (f) Agreement among the countries in the subregion on the host country for each multinational core project and the respective roles of the others in implementing the core projects. This would include agreement on:
- (i) Supply of the requisite raw materials and energy;
  - (ii) Purchase of intermediate and final products;
  - (iii) Equity shareholding, majority of which should be owned by African countries;
  - (iv) Training and allocation of manpower to the project;
  - (v) Conducting R & D related to the project;
  - (vi) Exchange of information;

- (vii) Management of the enterprise;
- (viii) Subcontracts, where feasible.
- (g) Assistance by intergovernmental organizations and development banks in the subregion in the mobilization of financial and other resources, including investment promotion for the implementation of the multinational core projects;
- (h) Strengthening or establishment of operational arrangements, such as multinational corporations or enterprises linked with corresponding national corporations, for the implementation of specific project or complex of projects. In this regard, it should be noted that in establishing multinational enterprises aimed at a lasting and effective economic relationship, it may be necessary for each partner, particularly the Governments, to share in the risks and rewards of the enterprises and participate fully in the decision-making at the highest managerial level;
- (i) Involvement of African chambers of commerce and industry or manufacturers and their associations as well as competent local consulting firms from the outset of the project, increasing their participation/involvement as the project develops.

77. In order to implement the measures proposed above, a number of policy actions will be required. These are predicated on the assumption that unless the productive capacity of the subregion is enhanced, the volume of trade will suffer. Since the promotion of trade between countries in the subregion bears implications for the currency arrangements between Member States, it would be desirable to ensure convergence in the compensation mechanisms among the countries of the subregion: a matter that should be considered by the subregional organizations concerned.

78. Institutional measures to effect changes and implement policies and programmes should therefore include strengthening the secretariats of the relevant intergovernmental organizations, especially AIDO, the Maghreb Industrial Studies Centre (CEIM), the ECA MULPOC Office for North Africa and the various joint committees or commissions, in order to enhance their capabilities in carrying out their various functions, including the following:

- (i) To gather, analyse and disseminate relevant industrial data and information from and to all Member States, the private sector, associations, institutions and other bodies in the subregion;
- (ii) To develop and promote an effective working relationship among the member countries and co-operating organizations;
- (iii) To serve as a resource unit for the promotion of subregional industrial projects, providing advice on and assistance in securing investment, expansion of markets, acquisition of technology and know-how, and project negotiations within the subregion and without;
- (iv) Formulation and development of subregional industrial policies and strategies to complement those at national level;

- (v) Preparation of priority subsectoral studies;
- (vi) Identification, preparation, implementation and follow-up of projects.

79. These institutions will need to be properly staffed with competent personnel so as to enable them to monitor and co-ordinate effectively the various activities relating to the formulation and implementation of the subregional programme and projects, especially those in the priority industrial core subsectors and support areas. They should maintain a dynamic working relationship with the relevant intergovernmental organizations, with national, subregional and regional organizations, as well as with UNIDO and ECA. They should also keep themselves fully informed of all major technical assistance proposals and programmes relating to industrial projects in the subregion.

80. It is also urged that action be taken, as recommended in the programme for the IDDA and in the guidelines for priority actions during the preparatory phase of the Decade, to establish a subregional committee of experts on the IDDA, which could reinforce the existing subregional industrial co-ordination machinery and monitor the implementation of the programme. Proper co-ordination also needs to be maintained not only among the various subregional bodies (notably AIDO, CEIM and ECA/MULPOC Office) but also between them and UNIDO in order to avoid undue duplication and to ensure effective implementation of the programme, once endorsed by the competent legislative authorities of the subregion.

#### Promotion of the programme

81. In order to facilitate the implementation of the programme and to create greater awareness in the subregion, it is recommended that the programme be widely circulated among all relevant economic agents in the subregion, especially at the national level. They should be asked how they, the Government or business communities, can best promote the programme. The importance of involving the private sector has already been stressed. The successful mobilization of local resources can serve as an inspiration to genuine foreign investors, encouraging them to participate in viable joint venture projects. All these activities also require the full use of the information media, as well as careful monitoring and co-ordination. It is recommended that the relevant subregional organizations, especially AIDO and the ECA MULPOC Office should collaborate with the project sponsors in carrying out this co-ordination.

#### Mobilization of financial resources

82. Implementation of the projects contained in the proposed programme will require considerable financial resources which the various countries will have to mobilize for themselves or acquire on the financial markets. The main sources of financing which the majority of countries in the subregion are already using include: the World Bank, the African Development Bank (ADB), the Arab Bank for Economic Development in Africa (ABEDA), the Islamic Development Bank, the Arab Fund for Economic and Social Development (AFESD) and the OPEC Fund.

83. Although the countries in the subregion are expected to use all the economic and diplomatic channels at their disposal to promote the projects

identified, UNIDO could be requested to provide assistance through its investment promotion programme, including the use of its Investment Promotion Services. Although it disposes of only limited resources itself, UNIDO could intensify its endeavours to help Governments to submit requests to various bilateral and multilateral agencies and thus tap funds available to those agencies. Over and above its investment fora and related promotional activities, UNIDO could evolve innovative ways and means of involving major financial institutions and assisting countries in the subregion to secure their co-operation.

Role of the co-ordinating and other agencies

84. As stated in the initial programme, the successful implementation of core industries calls for the development of human and technological capabilities, the mobilization of financial resources as well as the establishment or strengthening of capabilities to service and augment the industrialization process in the subregion. The agencies and organizations of the United Nations system, in particular UNIDO and ECA, in close co-operation with the ADB and other specialized African organizations can contribute to meeting those requirements and thus help to overcome the acute developmental problems of the subregion.

85. For the most part, these organizations could provide technical assistance in the following areas:

- (a) Updating the subregional industrial promotion programme;
- (b) Preparing of pre-investment studies, including investment profiles on selected projects in the subregion, providing information on such items as: consumption; plant size; raw materials; utilities; technology; investment; manpower and training; probable production cost; project/programme profitability; and potential market(s);
- (c) Identifying specific areas and modes of co-operation between countries, as well as between producers and R & D facilities, in implementing the programme for the Decade;
- (d) Establishing a subregional committee of experts to review and update the regional integrated industrial promotion programme, monitor its implementation and co-ordinate the activities of the technical committees described in paragraph 76(b);
- (e) Developing capabilities related to: industrial planning; industrial consultancy; project preparation; procurement of supplies; and support of local entrepreneurs and manufacturers including the creation of associations related to core programmes;
- (f) Organizing technical consultations, negotiations and investment promotion meetings in specific core subsectors. These will include consultation and negotiations between:
  - (i) African countries, involving both State finance institutions and local agents of production and distribution;

- (ii) African States and potential partners from other developing countries through ECDC, involving potential investors from those countries as well as financial institutions;
- (iii) African States and potential partners from developed countries.

86. It is perhaps important to stress the need for a system, as indicated in paragraphs 80 and 85(a), which should be developed by UNIDO, in co-operation with the AIDO, CEIM and the ECA MULPOC Office as well as other appropriate subregional organizations, to assist countries in monitoring the implementation of the revised programme. In this regard and as part of the monitoring system, UNIDO should continue to convene regular meetings, for example every two years, of all the Governments, co-ordinating agencies and organizations concerned in order to review, adjust and monitor the implementation of the programme. For such a system to be effective, Member States and other project sponsors would have to provide information on the projects' status of implementation.

ANNEX I

Criteria for selecting multinational/  
subregional industrial core projects

For an industrial project to qualify as a multinational/subregional core project, it should meet all requirements in group I and one or more additional requirements in group II.

I. Basic requirements

The project:

- (a) Provides inputs into the priority sectors selected 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, secondly other African countries and thirdly non-African countries;
- (d) Produces intermediates for further processing or fabricating in an increasing number of established or planned industries or 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 people in the subregion and, if required, in 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/purchase arrangements for raw materials, intermediates and final products; subcontracting; barter, equity shareholding; etc.;
- (h) Contributes to reducing the region's heavy reliance on external factor inputs.



II. Additional requirements

The project:

- (a) Offers comparative advantage(s) over similar project(s) - actual or potential - in other groups of countries (African and non-African), particularly in respect of raw materials, energy and the infrastructure required;
- (b) Complements related project(s) or existing production unit(s) in the subregion;
- (c) Earns foreign exchange through the export of its products, including upgrading of raw materials;
- (d) Results in rehabilitation and rationalization of existing production unit(s);
- (e) Replaces, whenever practical, synthetic materials by natural materials, particularly those that are renewable.

**ANNEX II**  
**STATUS OF IMPLEMENTATION OF PROJECTS INCLUDED IN THE INITIAL INTEGRATED INDUSTRIAL PROGRAMME**

Project number, title and location of the project	Promoters/ Sponsors	Conclusions and recommendations of the Tunis meeting, March 84	Action taken since March 1984	Observations and recommendations
<b>I - CORE PROJECTS</b>				
<b>ENGINEERING INDUSTRY</b>				
1. Establishment of tractor assembly plants Sudan/Egypt	Ministry of Industry, Sudan and El Nasr Automotive and Manufacturing Company of Egypt	<p>1. Sudan and Egypt would constitute the primary markets, any surplus would go to other countries in the subregion.</p> <p>2. The recommendation was to produce high-powered tractors (up to 115 HP) and to consider the possibility of subcontracting the production of certain components to other countries in the subregion.</p> <p>3. The meeting recognised the subregional character of the project and recommended that it be included in the programme for implementation in the short-term.</p>	<p>In Egypt two plants were in operation and a third under construction. A public sector company, El-Nasr Company, with an annual capacity of 5,000 units was currently assembling and manufacturing 3,000 Yugoslav and Romanian (45-85 HP) models a year. A military plant was assembling 2,000 (25-35 HP) tractors a year, while a third plant was under construction that would assemble and manufacture 4,000 (74 HP) Soviet units a year.</p> <p>In the Sudan, the nature of the soil and terrain called for a more powerful tractor. A joint project with an Italian company for the production of 3,000 (120 HP) units a year had been included in the current five-year national development plan.</p>	<p>Agricultural equipment in general and tractor assemblies in particular are of considerable significance to the development perspectives of Sudan. This is a priority project for the development plan. Al-Nasr Automotive Industry of Egypt considers it very important for them to participate in this joint mutually beneficial project. Active assistance is recommended.</p>
2. Manufacture of pumps for irrigation purposes Morocco/Tunisia	Government of Morocco (ODI) and Tunisia	<p>1. Studies for the realization of such factories had been undertaken by Tunisia and Morocco, which had decided to join efforts in establishing a joint factory.</p> <p>2. The project was retained for implementation in the short/medium term.</p>	No action taken.	<p>No decision had so far been taken on this project, which had been suspended for the moment. It should therefore not be retained in the revised programme.</p>
3. Manufacture of diesel engines for tractors, trucks, lorries and buses Morocco/Tunisia	Government of Tunisia and Morocco	<p>1. At the time of presenting the project, no precise data had been available. It was recommended that the possibility of co-operation with Egypt be studied.</p> <p>2. The project was included in the programme for implementation in the long term.</p>	No action taken as the project has been cancelled	Project should therefore not be retained in the revised programme.
4. Establishment of a diesel engine manufacturing plant in Sakhiat Sidi Youcef Tunisia	Government of Tunisia and Algeria	<p>1. The diesel engines produced would be used primarily in the agricultural sector</p> <p>2. The project was retained for execution in the short/medium term.</p>	<p>1. A joint enterprise had been established between the two countries (SARMO).</p> <p>2. Pre-investment studies carried out.</p> <p>3. An industrial partner chosen and the contract signed in January 1986.</p>	<p>The project went into operation in December 1987. It is therefore recommended for retention in the revised programme</p>

Project number, title and location of the project	Promoters/ Sponsors	Conclusions and recommendations of the Tunis meeting, March 84	Action taken since March 1984	Observations and recommendations
5. Manufacture of lathes and milling machines Morocco	Government of Morocco (ODI) and Tunisia (BDET)	<p>1. During the review of the project, it was noted that the factory, though already operational faced market problems owing to uncompetitive prices.</p> <p>2. The two partners decided to lift tariff barriers for these products.</p> <p>3. Consideration of Egyptian and Sudanese markets was envisaged.</p> <p>4. The project which includes the expansion of the factory was retained for implementation in the short/medium term.</p>	<p>1. Tunisia has joined the company (CEM).</p> <p>2. The company has already supplied machines to professional institutions and small industries in Morocco and has also sold machines abroad.</p> <p>3. A diversification of products is envisaged.</p>	<p>1. The production unit, located in Fés, Morocco, is already operational.</p> <p>2. As emphasized at the meeting in March 1984, one of the objectives of the project was its local and subregional integration. It would be necessary to develop this sector further by taking into consideration the market possibilities offered by other countries in the subregion in respect of spare parts and related accessories.</p> <p>3. The company is conscious of its restricted market, and therefore requests assistance in promoting its products and in conducting extensive market surveys.</p>
6. Manufacture of wood working machinery Tunisia	Government of Morocco (ODI) and Tunisia (BDET)	<p>As for the previous project, and in light of the information provided by the two countries, expanding the market to other countries in the subregion would benefit the implementation of this project. It was also retained for implementation in the short/medium term.</p>	<p>The project has been implemented, and a joint company between the two countries was established.</p>	<p>1. The factory started went into operation in June/July 1985 and is situated in Grumbelja, Tunisia</p> <p>2. The Tunisian partner is currently studying those sectors where complementary assistance might be required.</p> <p>3. It might be interesting to promote this enterprise and its products in other countries in the subregion or in the African region as a whole.</p>
7. Establishment of a compressor plant Morocco/Libya/ Tunisia	Government of Morocco (ODI) and Tunisia (BTKD) and Libya	<p>The project had been studied by AIDO was retained for implementation in the long term. Co-operation with the Arab Company for Industrial Investment was recommended.</p>	<p>The feasibility studies are being carried out by AIDO which envisages promotion of the two projects in the subregion. The countries proposed are: Algeria, Egypt, Libya, Tunisia.</p>	<p>The project is being actively followed-up, its scope of co-operation being expanded to include Libya, Algeria, Tunisia and Morocco. A meeting was held between the co-operating companies in Tripoli in late March/early April 1985 (Morocco could not attend) where an agreement was signed for setting up a plant to produce 1 million units and a committee was established to implement the project. This committee is scheduled to meet in Algiers on 26 April. Decision on location will be taken later. Current information favours its location in Algeria. Past studies undertaken separately by the co-operating parties indicate a market of the size of 200,000 refrigerator compressor units for Libya; 700,000 for Algeria; and 150,000 for Morocco (90% in private sector). Figures for Tunisia are not available. The committee is expected to make a more accurate assessment of demand.</p>

Project number, title and location of the project	Promoters/ Sponsors	Conclusions and recommendations of the Tunis meeting, March 84	Action taken since March 1984	Observations and recommendations
<b>AGRO-INDUSTRY</b>				
8. Establishment of sugar mills Sudan	Ministry of Industry Sudan	<p>1. The representatives of Egypt and Tunisia supported the establishment of the two sugar mills.</p> <p>2. The project was retained for implementation in the short/medium term.</p>	<p>A global study for the food sector has been carried out by AIDO and is being studied by the Sudanese authorities. This study includes the establishment of a sugar mill with an annual capacity of 120,000 tons. The project enjoys high priority in the Sudan and has been included in the four-year development plan.</p>	<p>Considering the gap between the production and consumption of sugar and the fact that this is a major source of energy for the common people in all the countries of the subregion, the potential of joint projects seems to be high. The Kanana sugar project in Sudan is a case in point to regional co-operation with Gulf countries. A similar joint project with North African countries is being proposed.</p>
9. Establishment of a paper factory Sudan (Kosti or other location)	Ministry of Industry Sudan	<p>The project was presented in the context of co-operation between Sudan and Egypt. Sudan would provide the location and raw materials, Egypt the technical know-how.</p> <p>The project would also supply the other countries in the subregion. The project was retained for implementation in the short/medium term.</p>	<p>The project is included in the global study proposed by AIDO. The regional nature of the project needs to be stressed but a more detailed study needs to be undertaken with the assistance of UNIDO. Attention also needs to be drawn to similar projects in Egypt. A feasibility study had been undertaken in respect of a joint Italo-Egyptian project for a bagasse-based paper mill with an annual capacity of 100,000 tons. Tenders have been invited for the equipment and machinery required. Plans have also been drawn up for the production of newsprint based on wood pulp to meet local demand.</p>	<p>The project is included in the four year development plan. A detailed study is needed. Some cellulose raw materials are available in Sudan. The Government would prefer a joint project, in the light of the number of projects in this paper sector, integration would be desirable between the units being established in Egypt and the Sudan, but also among existing capacities throughout the subregion so as to achieve maximum efficiency, avoid duplication and ensure profitable complementarity.</p>
<b>TEXTILE INDUSTRY</b>				
10. Establishment of a footwear production plant Tunisia/Libya	Government of Tunisia and Libya	<p>1. The projects 10, 11, 13, 14 had been formulated and approved by the Joint Libyan-Tunisian High Commission.</p> <p>2. The implementation of the project was foreseen in the long term.</p>	<p>No action taken as the joint Libyan-Tunisian High Commission decided to cancel the project.</p>	<p>Project should not be retained in the revised programme.</p>
11. Establishment of a spinning mill Tunisia/Libya	See 10 above	<p>See 10 above.</p>	<p>A preliminary study had been made for a joint Libyan-Tunisian plant to be set up in Tunisia.</p>	<p>The production of textiles in the subregion which, if a preferential trade area were to be established, should be carefully reviewed in terms of the complementarity of production and markets in each country. There is a growing demand for synthetic yarns in different countries in the subregion and AIDO has, for example, undertaken feasibility studies related to the production of polyester and acrylic fibres as joint Arab projects. Algeria is currently importing 80,000 tons of synthetic yarn (at a cost of DA1 billion,</p>

Project number, title and location of the project	Promoters/ Sponsors	Conclusions and recommendations of the Tunis meeting, March 84	Action taken since March 1984	Observations and recommendations
12. Expansion of a kenaf sack production plant Sudan (Abu Naama)	Ministry of Industry Sudan	<p>1. The project was designed to meet the increasing demand for sacks and the raw material was widely available.</p> <p>2. The project was supported by Egypt which would provide know-how.</p> <p>3. The project was retained for implementation in the short/medium term.</p>	No action taken. However, during the visit of the Director-General of UNIDO to the Sudan in March 1984 he had been requested to have his Organisation carry out the study required for the reactivation of the plant.	<p>equivalent to \$200 million) each year. Egypt has two large polyester production units that could meet part of the demand in other countries in the subregion. There is thus a need to achieve effective co-ordination, create the appropriate infrastructure and promote trade within the subregion.</p> <p>The project which is regional in nature possesses an installed output capacity of 10 million kenaf sacks a year and is used to pack agricultural products for export throughout the subregion.</p>
13. Establishment of a knitwear factory in Tunisia/Libya	See 10 above	See 10 above.	No action taken as the countries concerned decided to cancel the project.	It is recommended that the project not be retained in the revised programme.
14. Establishment of a garment factory Sudan	See 10 above	See 10 above.	No action taken as the countries concerned decided to cancel the project.	It is recommended that the project not be retained in the revised programme.
<b><u>BUILDING MATERIALS INDUSTRY</u></b>				
15. Establishment of the Port Sudan cement factory Sudan	Ministry of Industry Sudan	<p>The factory was designed to meet growing national demand for cement.</p> <p>It was proposed to implement the project in co-operation with Egypt which would provide the technical know-how and labour. The project was retained for implementation in the short/medium term.</p>	No action taken, but UNIDO's assistance has been requested in updating earlier studies and in selecting the plant site.	Given the experience of some North African countries in cement production and the acute need for cement in the subregion, there is a basis for co-operation in this area. The projects have been included in the four-year development plan for priority execution. Detailed studies were conducted some time ago and need to be updated. It is recommended that the project be retained in the revised programme.
16. Establishment of a plant to produce white cement Tunisia	Government of Algeria and Tunisia	Execution of the project had started and it was retained in the programme for implementation in the short/medium term.	<p>1. The two countries have established a joint company.</p> <p>2. Project costs are estimated at DT 95 million.</p> <p>3. Production was scheduled to start in mid-1987.</p>	The project entered the operational phase in November 1987. It is recommended that the project be retained in the revised programme.

Project number, title and location of the project	Promoters/ Sponsors	Conclusions and recommendations of the Tunis meeting, March 84	Action taken since March 1984	Observations and recommendations
17. Manufacture of marble tiling Sudan	Government of Egypt and Sudan	<p>1. The project was presented by the representative of Egypt who indicated that the feasibility studies were underway and that both countries were keenly interested in this product.</p> <p>2. The project was retained for implementation in the short/medium term.</p>	<p>No action had yet been taken. The possibility of a joint Sudan/Tunisian project was being studied within the framework of co-operation between the two countries and in the recently signed industrial and commercial Egypt had also been invited to consider a joint undertaking.</p>	<p>Considerable studies would need to be carried out viz. raw materials assessments/evaluations and, techno-economic analysis. The project offers good potential for co-operation with Tunisia and Algeria. It is therefore recommended that the project be retained in the revised programme.</p>
<b>CHEMICAL INDUSTRY</b>				
18. Establishment of a lithopone production plant Tunisia	Government of Algeria and Tunisia	<p>1. The project was to start production in 1986.</p> <p>2. The project was retained for implementation in the short/medium term.</p>	<p>1. The studies for the project have been carried out.</p> <p>2. The two parties have established a joint company.</p> <p>3. A Sponsor is being selected.</p>	<p>Despite the actions already taken, the countries concerned have decided to cancel the project for reasons of non-profitability and it is therefore recommended that the project not be retained in the revised programme.</p>
19. Establishment of a sheetglass production unit Sudan	General Organization for Industrialization (GOPI) Egypt	<p>1. The importance of the project presented by Egypt was recognized, primarily on account of the great demand for the product in the country.</p> <p>2. It was also recommended to retain the project for implementation in the short/medium term.</p>	<p>Although no studies had yet been carried out on the project, Egypt is still highly interested. Al-Naar Glass and Crystal Co. would be prepared to hold discussions on the project and to participate in its study.</p>	<p>No information available. No detailed studies are known to have been conducted. Project not included in the Government's four-year development programme. AIDO has undertaken a feasibility study for a project relating to the production of glass in Morocco using the floating process. The result of that study includes all the countries in the subregion. In Egypt, a sheetglass production project using the same process and with an envisaged annual capacity of 108,000 tons has been carefully studied and offers good prospects for subregional co-operation. Nevertheless, there still appears to be a need for the project which is recommended to be retained in the revised programme.</p>

Project number, title and location of the project	Promoters/ Sponsors	Conclusions and recommendations of the Tunis meeting, March 84	Action taken since March 1984	Observations and recommendations
<b>II - SUPPORT PROJECTS</b>				
S1 Assistance in the development of an industrial training programme	ECA-OAU-UNIDO	The importance of a project of this kind was confirmed during the UNIDO consultation on training of industrial manpower held in Stuttgart in 1982. It was also agreed to retain the project which would, <u>inter-alia</u> , permit the strengthening of institutions and professional training centres in the subregion and contribute to the acquisition of improved industrial labour skills.	Within the framework of the IDDA, as well as of its regular technical co-operation programme, assistance has been provided by UNIDO to several institutions in Morocco, Egypt and Algeria with the aim of re-inforcing their training capacity for the benefit of the other countries in the subregion or Africa as a whole. AIDO has issued a directory of training institutes in the Arab region, citing details of areas covered and courses given, that was updated every two years. In the UNIDO/AIDO agreement, it had also been agreed to organise training related to: industrial management and quality control; industrial project preparation and evaluation; and industrial maintenance. The courses were a direct outcome of a training strategy that UNIDO had developed for the subregion which also includes strengthening of engineering capabilities in small-scale industries. ECA had also distributed lists of training courses which, it was hoped, would contribute to the development of an effective training framework for the subregion.	1. The project is currently at the conceptual stage and will have to be discussed by the parties concerned before finalization. 2. Given its importance to the consolidation and the development of industrial co-operation in the subregion, this project should be given high priority and retained in the revised programme.
S2 Improvement of industrial consultancy and management capabilities	ECA-OAU-UNIDO	Associated with the previous one, its importance was also recognized. It was also retained for implementation in collaboration with AIDO.	AIDO has carried out a study identifying consultancy services in the Arab world. A seminar is being organised by UNIDO in collaboration with the Algerian Management Institute in this respect.	The study carried out by AIDO for the Arab world, which includes the countries of the subregion, could constitute an important basis for the project. It is therefore recommended that the project be retained in the revised programme.

Project number, title and location of the project	Promoters/ Sponsors	Conclusions and recommendations of the Tunis meeting, March 84	Action taken since March 1984	Observations and recommendations
S3 Development of local entrepreneurship	ECA-OAU-UNIDO	The importance of the development of small- and medium-scale industries was recognized and the project was recommended for inclusion in the work carried out by ECA in this sector.	The first edition of the directory has already been completed and distributed by ECA. Furthermore, UNIDO has produced and distributed a study on "How to start manufacturing industries" containing project profiles for small-scale industries. UNIDO has been requested by AIDO to translate this document into Arabic. AIDO has also developed some model legislation that could serve as a useful guide for national legislators wishing to improve legislative support for small-scale industrial entrepreneurs.	<ol style="list-style-type: none"> <li>1. In many countries of the subregion, there are institutions charged with the promotion of small- and medium-scale industries which develop their own project profiles. It is thus important to assist these institutions to co-ordinate their actions by familiarizing them with and harmonizing their work through this project.</li> <li>2. These activities will facilitate the standardisation of the project profiles, the method of utilisation and their implementation in this field. It is recommended that the project be retained in the revised programme.</li> </ol>
S4 Promotion of the food processing industry in North Africa	AIDO and Arab Federation of Food Industries	The project was retained in the initial programme.	AIDO has carried out a study, the objective of which is to make concrete proposals for the countries of in the subregion.	<ol style="list-style-type: none"> <li>1. In this context, AIDO has carried out a feasibility study for Sudan. This study is being reviewed by the Sudanese authorities who will identify the proposals of interest to them.</li> <li>2. It is important that the countries in the subregion develop and process their food products. It is also necessary to carry out this study in order to enable action to be taken in this field which is of high priority. It is therefore recommended that the project be retained in the revised programme.</li> </ol>
S5 Upgrading of the Tunisian National Centre for Leather and Footwear into a subregional centre	Tunisia (CNCC)	The project was retained in the initial programme.	No action taken.	<ol style="list-style-type: none"> <li>1. The Tunisian authorities responsible agree to opening their Centre to other countries in the subregion, they have also proposed to change the legal status of the Centre.</li> <li>2. A diagnostic study of the Centre is required by the Tunisian part. UNIDO indicated that such a study would be considered within the newly launched large-scale regional leather programme for Africa. It is therefore recommended that the project be retained in the revised programme.</li> </ol>
S6 African Regional Centres for Genetic Engineering and Biotechnology Tunisia-Egypt	Tunisia/ Egypt	Egypt and Tunisia proposed to host the two centres that would be established in Africa.	No action taken.	The two countries have gained considerable experience in this field and have agreed to establish the two centres in their countries. It is therefore recommended that the project be retained in the revised programme.



Project number, title and location of the project	Promoters/ Sponsors	Conclusions and recommendations of the Tunis meeting, March 84	Action taken since March 1984	Observations and recommendations
S7 Manufacture of rolling stock for passengers and freight	different countries	The project was retained given the needs of the subregion and the experience acquired by certain countries (Morocco, Algeria, Tunisia and Egypt).	Although no action was taken on this project, active consideration is being given by various joint committees, including the Libyan Arab Jamahiriya, to the new project.	The project is cancelled and a new one introduced relating to industrial maintenance and assembly.
S8 Subregional forge for the production of wheels and axles	Tunisia	The project was retained in the programme.	Preliminary studies have been carried out.	The project is withdrawn in the light of the studies carried out. Some aspects of it would, however, be included in the new project relating to industrial maintenance and assembly.

PROJECT PROFILES RETAINED IN THE REVISED PROGRAMME

ANNEX III

PROJECT PROFILE NO. 1

Priority:

First (short-term)

SUBSECTOR: Agro- and agro-based industries (foodprocessing)

SUBREGION: North Africa

1. Project Title: Establishment of sugar mills, Sudan

2. Objective: To establish two medium-sized sugar production units to serve the export market

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3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
		9. Physical infrastructure

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3. Sudanese Ministry of Industry	5. Feasibility study completed	7. Available as sugar-cane plantations are normally attached to factories
4. Central Sudan	6. Formal agreement on joint projects is required from the interested parties	8. Available
		9. Will be available

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10. Projected demand by product	12. Capacity by product	14. Additional information including collaboration arrangements already made and type of participation sought by member states
11. Market	13. Total investment	

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10. Subregional demand is estimated at 6 million tons in 1990	12. 100,000 tons per annum for each mill	14. A joint venture company is to be established. Four units with total capacity of 700,000 tons are now being rehabilitated through World Bank and Arab Fund assistance, and they will reach full capacity by 1990. Suitable weather conditions for sugar-cane plantations, availability of adequate water and broad expanses of farmland ensure viability of such projects. Subregional co-operation potential considered very high since all countries are partly dependent on supply of this critical commodity.
11. Countries of the subregion and other neighbouring countries	13. approx. US\$115 million	

PROJECT PROFILE NO. 2

Priority:

Second (medium-term)

SUBSECTOR: Agro- and agro-based industries (pulp and paper)

SUBREGION: North Africa

1. Project Title: Establishment of a paper factory, Sudan

2. Objective: To produce pulp and paper to meet growing local and subregional demand

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3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
		9. Physical infrastructure
3. Sudanese Ministry of Industry	5. Feasibility study completed	7. Bagasse, kenaf, cotton lint, papyrus and species of wood are abundantly available
		8. Available
4. Kosti or another site, the Sudan	6. The feasibility study to be updated	9. Well developed in the area

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10. Projected demand by product	12. Capacity by product	14. Additional information including collaboration arrangements already made and type of participation sought by member states
11. Market	13. Total investment	
10. Figure not available	12. 50 - 150 tons per day (three shifts)	14. Joint venture or equity participation. In elaborating the project, consideration should be given to Egyptian proposal for the establishment of a similar project in co-operation with the Sudan. The project is included in the four-year development plan of the Sudan.
11. Local market and surplus will be exported	13. About US\$170 million	

PROJECT PROFILE NO. 3

Priority:

Second (medium-term)

SUBSECTOR: Textile industry (spinning/weaving)

SUBREGION: North Africa

1. Project Title: Establishment of a spinning mill

2. Objective: To promote the local production of pure cotton and blended (cotton-synthetic) yarn

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3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
		9. Physical infrastructure

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3. Governments of Tunisia and Libyan Arab Jamahiriya	5. Preliminary study made for a joint Libyan/ Tunisian plant	7. Cotton imported but basic materials for synthetic yarn available in Libya
4. To be deter- mined	6. Thorough review in order to ascertain viability	8. Available
		9. Adequate

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10. Projected demand by product	12. Capacity by product	14. Additional information including collaboration arrangements already made and type of participation sought by member states
11. Market	13. Total investment	

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10. Figure not available. Demand in 1980 in Tunisia alone was 2,170 tons	12. 4,000 tons yarn per annum (2,000 tons cotton and 2,000 tons blends)	14. Labour available. Thorough analysis/revision is needed to ascertain the viability of the project. The production of textiles in the subregion which, if a preferential trade area were to be established, should be carefully reviewed in terms of the complemen- tarity of production and markets in each country. There is a growing demand for synthetic yarns in different countries in the subregion and AIDO has, for example, undertaken feasibility studies related to the co-operation of polyester and acrylic fibres as joint Arab projects. Algeria is currently importing 80,000 tons of synthetic yarn (at a cost of DA1 billion, equivalent to \$200 million) each year. Egypt has two large polyester production units that could meet part of the demand in other countries in the subregion. There is, thus, a need to achieve effective co-ordination, create the appropriate infrastructure and promote trade within the subregion.
11. Weaving plants and other users in both countries	13. To be specified in the feasibility study	

PROJECT PROFILE NO. 4

Priority Virat (short-term)

**SUBSECTOR:** Textile industry (spinning/weaving)

**SUBREGION:** North Africa

**1. Project Title:** Expansion of a kenaf sack production plant, Sudan

**2. Objective:** To expand existing kenaf sack production facilities to meet current/future local/export demand

<b>3. Promoter/ sponsor</b>	<b>5. Project status</b>	<b>7. Raw materials</b>
<b>4. Location</b>	<b>6. Immediate follow-up</b>	<b>8. Energy</b>
<b>3. Sudanese Ministry of Industry</b>	<b>5. Plant currently in operation and pre- feasibility study related to plant expansion completed</b>	<b>9. Physical infrastructure</b>
<b>4. Abu Naama, the Sudan</b>	<b>6. Feasibility study related to expansion to be undertaken</b>	<b>7. Available</b>
		<b>8. Available</b>
		<b>9. Available</b>

<b>10. Projected demand by product</b>	<b>12. Capacity by product</b>	<b>14. Additional information including collaboration arrangements already made and type of participation sought by member states</b>
<b>11. Market</b>	<b>13. Total investment</b>	
<b>10. 50 million sacks per year for the Sudanese market</b>	<b>12. 30 million sacks per year</b>	<b>14. Labour available. Capacity of existing and other planned plants is estimated at 30 million sacks per year. The project which is regional in nature possesses installed output capacity of 30 million kenaf sacks a year and is used to pack agricultural products for export throughout the subregion.</b>
<b>11. Sudan and exports to other countries at a later stage</b>	<b>13. US\$50 million</b>	

PROJECT PROFILE NO. 3

Priority                      Second (medium-term)

**SUBSECTOR:**                      Building materials industry (cement)

**SUBREGION:**                      North Africa

**1. Project Title:**                      Establishment of the Port Sudan cement factory, the Sudan

**2. Objective:**                      To establish a new enterprise for the production of Portland cement

- 
- |   |   |  |
|---|---|--|
| <b>3. Promoter/<br/>sponsor</b>                 | <b>5. Project<br/>status</b>  | <b>7. Raw materials</b>  |
| <b>4. Location</b>                              | <b>6. Immediate<br/>follow-up</b>   | <b>8. Energy</b>   |
| <b>3. Sudanese<br/>Ministry of<br/>Industry</b> | <b>5. Feasibility study<br/>completed</b>   | <b>9. Physical infrastructure</b>  |
| <b>4. Port Sudan,<br/>the Sudan</b>             | <b>6. The feasibility study<br/>to be updated. UNIDO<br/>assistance sought.</b>                 | <b>7. All the raw materials<br/>required are available<br/>locally. Exact site to be<br/>selected with assistance<br/>of UNIDO which had been sought</b> |
|   | <b>8. Diesel generators (with a<br/>capacity of approx. 15 MW)<br/>will have to be supplied</b> | <b>9. Well developed</b>   |

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**10. Projected  
demand by  
product**

**11. Market**

**12. Capacity  
by product**

**13. Total  
investment**

**14. Additional information  
including collaboration  
arrangements already made  
and type of participation  
sought by member states**

- 
- 10. Figure not available**                      **12. 500,000 tons per annum**
- 11. 60 per cent local demand  
40 per cent export**                      **13. Approx. US\$85 million**

**14. Joint venture or equity  
participation. Project  
included in the four year  
development plan of Sudan  
for priority execution. Given  
the experience of some North  
African countries in cement  
production and the acute needs  
of Sudan, clear potential and  
basis for co-operation appear  
to exist.**

PROJECT PROFILE NO. 6

Priority:

First (short-term)

SUBSECTOR: Building materials industry (cement)

SUBREGION: North Africa

1. Project Title: Establishment of a plant to produce white cement, Tunisia

2. Objective: To produce white cement required in Algeria and Tunisia, thus contributing to the reduction of imports

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3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
		9. Physical infrastructure

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3. Governments of Algeria and Tunisia	5. Plant operational	7. Available
		8. Available
4. Tunisia	6. Production started in 1987.	9. Available

---

10. Projected demand by product	12. Capacity by product	14. Additional information including collaboration arrangements already made and type of participation sought by member states
11. Market	13. Total investment	
10. 60,000 tons per annum Tunisia, 120,000 tons per annum, Algeria	12. 200,000 tons per annum	14. Joint venture company already established. Equity is: Tunisia (40 per cent), Algeria (40 per cent) and the Arab Maghreb Co-oper- ation Bank (20 per cent). Project completed and production started in November 1987.
11. Algeria and Tunisia (50 per cent each)	13. 95 million Tunisian dinars (approx. US\$110 million)	

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PROJECT PROFILE NO. 7

Priority:

Second (medium-term)

SUBSECTOR: Building materials industry (tiles)

SUBREGION: North Africa

1. Project Title: Manufacture of marble tiling, the Sudan

Objective: To produce marble tiles of various shapes, colour and size for flooring and other decorative purposes

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3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
		9. Physical infrastructure

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3. Governments of Egypt and the Sudan	5. Pre-investment studies completed	7. Available in the vicinity
		8. Available
4. Dardaib, the Sudan	6. Feasibility studies to be undertaken	9. Needs to be developed

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10. Projected demand by product	12. Capacity by product	14. Additional information including collaboration arrangements already made and type of participation sought by member states
11. Market	13. Total investment	

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10. Current domestic demand is estimated at 100,000 square metres	12. 50,000 square metres per annum	14. The Marble Production Company a joint Egyptian-Sudanese enterprise (50:50 partici- pation), was planning to speed up both studies and implementation so as to able to draw on Egyptian experience and start production either at the end of 1984 or at the beginning of 1985. Detailed studies are still not available. Considerable work still needs to be done on raw materials assessment/ evaluation, and techno- economic analyses. Accorded low priority for this planning period. However, considered to offer good potential for co-operation with Tunisia and Algeria within the framework of recently signed industrial and commercial protocol.
11. Domestic market in both countries	13. approx. US\$3.1 million, two thirds of which will be in convertible currency	



PROJECT PROFILE NO. 6

Priority: Third (long-term)

**SUBSECTOR:** Chemical industry (non-chemical products)

**SUBREGION:** North Africa

1. **Project Title:** Establishment of a sheetglass production unit, the Sudan

2. **Objective:** To promote local promotion of sheet glass, an essential building material currently imported by countries in the subregion

- |  |   |  |
|--|---|--|
| 3. <b>Promoter/<br/>sponsor</b>  | 5. <b>Project<br/>status</b>  | 7. <b>Raw materials</b>  |
| 4. <b>Location</b>   | 6. <b>Immediate<br/>follow-up</b>   | 8. <b>Energy</b>   |
| 3. <b>General<br/>Organization<br/>for Industrial-<br/>ization<br/>(Egypt)</b> | 5. <b>Conceptual stage</b>  | 9. <b>Physical infrastructure</b>  |
| 4. <b>The Sudan</b>  | 6. <b>Detailed pre-feasibility<br/>and feasibility studies<br/>to be undertaken</b> | 7. <b>Sand, quartz and dolomite<br/>available in the Sudan.<br/>Information on other raw<br/>materials (soda ash, sodium<br/>sulphate, borax, fluorapatite<br/>and cryolite) not available</b> |
|  |   | 8. <b>To be specified in the<br/>feasibility study</b>   |
|  |   | 9. <b>See 8 above</b>  |

10. **Projected  
demand by  
product**

11. **Market**

12. **See 8 above**

13. **See 8 above**

12. **Capacity  
by product**

13. **Total  
investment**

14. **See 8 above**

15. **See 8 above**

14. **Additional information  
including collaboration  
arrangements already made  
and type of participation  
sought by member states**

14. **No detailed studies are known  
to have been undertaken.  
Project not included in Sudan's  
development plan. AIDO has  
undertaken a feasibility study  
for a project relating to the  
production of glass in Morocco  
using the floating process.  
The result of that study  
includes all the countries in  
the subregion. In 1981, a  
sheetglass production project  
using the same process has  
been carefully studied and  
offers good prospects for  
subregional co-operation.  
Nevertheless, there still  
appears to be a need for the  
Sudan project which is  
recommended to be retained in  
the revised programme.  
Al-Masr Glass and Crystal  
Company, however, highly  
interested in discussing the  
project and assisting in study.**

PROJECT PROFILE NO. 9

Priority

Second (medium-term)

SUBSECTOR: Engineering industry (agricultural machinery and equipment)

SUBREGION: North Africa

1. Project Title: Establishment of tractor assembly plants, Egypt and Sudan

2. Objective: To assemble agricultural tractors of different horse-power (up to 75 HP)

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3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
		9. Physical infrastructure
3. Sudanese Ministry of Industry and El Nasr Auto- motive and Manufacturing Company, Egypt	5. Sudan has selected desired model. Feasibility study for the joint project to be made	7. A detailed study needs to be undertaken to determine the structure and allocation between Sudan and Egypt of units manufacturing various components and assemblies
4. Sudan (Wad Medani or Port Sudan) and Egypt	6. Formal agreement to launch the project is required	8. Would be secured through captive generation
		9. Available

---

10. Projected demand by product	12. Capacity by product	14. Additional information including collaboration arrangements already made and type of participation sought by member states
11. Market	13. Total investment	
10. Demand large for Sudan, would be specified once feasibility study for project has been updated and in-depth study of plant structure completed	12. See 10 above	14. It is a priority project in the four-year development plan of Sudan. Al-Nasr Auto- motive Industry of Egypt also considers it very important for them to participate in this joint mutually beneficial project. After a long drawn out process of evaluation and selection the proposals for the assembly of FIAT machines were recently accorded preference. It is a priority project for the development plan. Al-Nasr Automotive Industry of Egypt considers it very important for them to participate in this mutually beneficial joint project.
11. Sudan and Egypt	13. See 10 above	

PROJECT PROFILE NO. 10

Priority:

First (short-term)

SUBSECTOR: Engineering Industry (road and rail transport)

SUBREGION: North Africa

1. Project Title: Establishment of a diesel engine manufacturing plant, Tunisia
2. Objective: To manufacture low-power diesel engines (up to 45 HP) for trucks, small cars and tractors

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3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
		9. Physical infrastructure
3. Governments of Algeria and Tunisia	5. Plant operational	7. To be partly imported and partly supplied by the company already operating in Algeria
4. Sakkiet Sidi Youcef, Tunisia	6. Production started in December 1987	8. Energy available
		9. Available at the proposed site

---

10. Projected demand by product	12. Capacity by product	14. Additional information including collaboration arrangements already made and type of participation sought by member states
11. Market	13. Total investment	
10. 100,000 units in 1990 for Algeria alone	12. 25,000 units per annum	14. Project can be expanded to meet projected demand in the two countries and other countries of the subregion. The Algerian-Tunisian SAKMO has since been established and the project was completed in December 1987. The unit is now operational in Sakkiet Sidi Youcef.
11. Algeria (70 %) and Tunisia (30 %) with an appropriate retrocessive mechanism	13. 30 million Tunisian dinars (approx. US\$43 million)	

PROJECT PROFILE NO. 11

Priority:

First (short-term)

SUBSECTOR: Engineering industry (machine tools)

SUBREGION: North Africa

1. Project Title: Manufacture of lathes and milling machines, Morocco

2. Objective: To develop the production of machine tools in the subregion

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3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
		9. Physical infrastructure
3. Governments of Morocco (ODI) and Tunisia (Economic Development Bank of Tunisia BDET)	5. Assembly of machines in process	7. Certain semi-manufactured components will be imported and others manufactured locally
4. Fez, near the SIMEF foundry, Morocco	6. Choice of tooling equipment	8. Available, primarily elec- tric energy
		9. Building available

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10. Projected demand by product	12. Capacity by product	14. Additional information including collaboration arrangements already made and type of participation sought by member states
11. Market	13. Total investment	
10. Figure not available	12. 200 lathes and 200 milling machines per annum	14. Partnership entered into with HES of France. The unit is already operational in Fez, Morocco. Tunisian and Moroccan partners are looking for possibilities of gaining access to other markets in the subregion and need assistance in promoting their products.
11. Moroccan and Tunisian markets, as well as other countries	13. US\$5 million	

PROJECT PROFILE NO. 12

Priority:

First (short-term)

**SUBSECTOR:** Engineering industry (agricultural machinery and equipment)

**SUBREGION:** North Africa

**1. Project Title:** Manufacture of woodworking machinery, Tunisia

**2. Objective:** To develop the manufacture of woodworking machinery in the subregion

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<b>3. Promoter/ sponsor</b>	<b>5. Project status</b>	<b>7. Raw materials</b>
<b>4. Location</b>	<b>6. Immediate follow-up</b>	<b>8. Energy</b>
		<b>9. Physical infrastructure</b>

---

<b>3. Governments of Morocco (ODI) and Tunisia (BDET)</b>	<b>5. Plant operational</b>	<b>7. Certain semi-manufactured components will be imported and others manufactured locally</b>
	<b>6. Start-up of production March 1985</b>	<b>8. Available</b>
<b>4. Grumbalia, Tunisia</b>		<b>9. Available</b>

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<b>10. Projected demand by product</b>	<b>12. Capacity by product</b>	<b>14. Additional information including collaboration arrangements already made and type of participation sought by member states</b>
<b>11. Market</b>	<b>13. Total investment</b>	

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<b>10. Current demand estimated at 1,000 units</b>	<b>12. 1,000 units per annum</b>	<b>14. A joint stock company has been established and partner- ship entered into with LUREM of France. Project completed and the plant became operational in 1985.</b>
<b>11. Tunisia and Morocco</b>	<b>13. US\$4 million</b>	



PROJECT PROFILE NO. S1

SUBSECTOR: Industrial manpower development

SUBREGION: North Africa

1. Project Title: Assistance in the development of an industrial training programme

2. Objective: To prepare a comprehensive inventory of facilities for industrial training in the subregion and to evaluate their programmes and activities and to strengthen a number thereof in order to improve the training of the industrial manpower required in the region.

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3. Promoter/sponsor                      6. Project description and additional information

4. Location

5. Estimated total cost

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3. ECA/OAU/UNIDO

4. Countries of the subregion

5. Costs vary with each sub-project at the national or subregional level

6. Background: The project will provide a complete survey and evaluation of all training facilities/schemes in the subregion on the basis of which comprehensive subregional training programme can be prepared and implemented, due consideration being given to existing training facilities in industry. Within the framework of the IDDA, as well as its regular technical co-operation programme, assistance has been provided by UNIDO to several institutions in Morocco, Egypt and Algeria with the aim of re-enforcing their training capacity for the benefit of the other countries in the subregion or Africa as a whole. AIDO has issued a directory of training institutes in the Arab region, citing details of areas covered and courses given, that was updated every two years. In the UNIDO/AIDO agreement, it had also been agreed to organize training related to: industrial management and quality control; industrial project preparation and evaluation; and

industrial maintenance. The courses were a direct outcome of a training strategy that UNIDO had developed for the subregion which also includes strengthening engineering capabilities in the small-scale industry sector. ECA had also distributed lists of training courses which, it was hoped, would contribute to the development of an effective training framework for the subregion. The importance of a project of this kind of an industrial training was confirmed during the UNIDO consultation on training of industrial manpower held in Stuttgart in 1982. It was also agreed to retain the project which would, inter-alia, permit the strengthening of institutions and professional training centres in the subregion and contribute to the acquisition of improved industrial labour skills.

PROJECT PROFILE NO. S2

SUBSECTOR: Industrial manpower development SUBREGION: North Africa

1. Project Title: Improvement of industrial consultancy and management capabilities

2. Objective: To identify appropriate industrial management and consultancy institutions in the subregion with a view to strengthening their contribution to the implementation of the programme for the Decade.

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- |                         |   |
|-------------------------|---|
| 3. Promoter/sponsor     | 6. Project description and additional information |
| 4. Location             |   |
| 5. Estimated total cost |   |
- 

- |   |   |
|---|---|
| 3. ECA/OAU/UNIDO  | 6. <u>Background:</u> AIDO has carried out a study identifying consultancy services in the Arab world. This study which covers the Arab world, includes the countries of the subregion. It would therefore constitute an important basis for the project. The actions taken by UNIDO within the framework of its technical assistance and IDDA programmes includes a seminar to be organized, in collaboration with the Algerian Management Institute, in this respect. |
| 4. Countries of the subregion   |   |
| 5. Costs vary with each sub-project at the national and subregional level |   |



PROJECT PROFILE NO. S3

SUBSECTOR: Industrial manpower development SUBREGION: North Africa

1. Project Title: Development of local entrepreneurship (Directory of small-scale industrial project profiles)

2. Objective: To upgrade entrepreneurial industrial capabilities in the small-scale industry, thereby promoting the establishment of those types of small-scale and manufacturing industries required during the Industrial Development Decade for Africa (1980-1990).

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3. Promoter/sponsor      6. Project description and additional information  
4. Location  
5. Estimated total cost

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3. ECA/OAU/UNIDO      6. The project aims at assisting countries in the sub-region in laying the foundation for the accelerated rational and integrated development of the small-scale industry subsector with a view to satisfying basic consumer needs and development needs in rural and urban areas, as well as achieving the objectives spelt out in the programme for the Decade. The directory of project profiles will provide local small-scale industrial entrepreneurs with the detailed information and guidance they require for initiating, preparing and implementing small-scale industrial projects, with or without the help of extension services. It is envisaged that the directory of project profiles will be developed into a handbook for entrepreneurs and African investors interested in small-scale industrial promotion units. The first edition of the directory has already been completed and distributed by ECA. Furthermore, UNIDO has produced and distributed a study on "How to start manufacturing industries" containing project profiles for small-scale industries. UNIDO has been requested by AIDO to translate this document into Arabic. AIDO has also developed some model legislation that could serve as a useful guide for national legislators wishing to improve legislative support for small-scale industrial entrepreneurs.

PROJECT PROFILE NO. S4

SUBSECTOR: Other support projects SUBREGION: North Africa

1. Project Title: Promotion of the foodprocessing industry in North Africa

2. Objective: To assist the countries of North Africa to develop food processing and preservation industries based on local raw materials with the aim of achieving self-sufficiency in food production.

- 
- 3. Promoter/sponsor
  - 4. Location
  - 5. Estimated total cost
  - 6. Project description and additional information
- 

<p>3. AIDO and the Arab Federation of Food Industries</p> <p>4. Baghdad</p> <p>5. US\$150,000</p>	<p>6. <u>Background:</u> In their studies, The AIDO and the Arab Federation for Food Industries have identified the need to promote the development of food and allied industries in North Africa. There is a shortage of food supplies, hence the subregion imports a great amount of food such as vegetable oil, sugar, dairy, cereal products, baby and canned foods.</p> <p><u>Activities:</u> Given the above, it is proposed to carry out a survey of existing food processing and preservation industries in the countries of North Africa. On the basis of this study, opportunities will be identified and a programme prepared, consisting of the rehabilitation of existing industries, establishment of new industries and the development of related manpower and technology. Member States will be encouraged to formulate concrete investment projects for inclusion in the subregional programme at a later stage and for the mobilization of the funding required. Priority will be accorded to baby-foods, date-processing and preservation, food canning and packaging, dairy products, and the production of concentrates for soft drinks from local raw materials. AIDO has carried out a study, the objective of which is to make concrete proposals for the countries of the subregion. These proposals are being reviewed by some countries of the subregion in order to identify those of interest to them for follow-up action.</p>
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PROJECT PROFILE NO. 55

SUBSECTOR: Other support projects SUBREGION: North Africa

1. Project Title: Ungrading of the Tunisian National Centre for Leather and Footwear into a subregional centre

2. Objective: To establish a subregional centre for North Africa

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3. Promoter/sponsor 6. Project description and additional information

4. Location

5. Estimated total cost

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3. Tunisia: National Centre for Leather and Footwear

4. Tunisia

5. Studies currently in process in conjunction with UNIDO

6. The project stems from a recommendation made by UNIDO and ECA and subsequently retained by the Conference of African Ministers of Industry. It is planned, with the assistance of UNIDO to:

(a) Undertake an appraisal of the current situation at the National Centre for Leather and Footwear; and

(b) Take all necessary steps to upgrade the Centre into a subregional centre.

The above actions will be considered within the newly launched large-scale regional leather programme for Africa. The Tunisian authorities responsible agree to opening their Centre to other countries in the subregion, they have also proposed changing the legal status of the Centre.

PROJECT PROFILE NO. S6

SUBSECTOR: Other support projects SUBREGION: North Africa

1. Project Title: African Regional Centres for Genetic Engineering and Biotechnology
2. Objective: To establish regional centres for genetic engineering and biotechnology.

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3. Promoter/sponsor      6. Project description and additional information
4. Location
5. Estimated total cost

- 
3. Tunisia (Ministry of Higher Education and Scientific Research) and Egypt
4. Tunisia and Egypt
5. To be determined
6. Background: During the negotiations in Vienna on the establishment of an International Centre for Genetic Engineering and Biotechnology, it was recommended to establish initially two centres, one in Italy and the other in India. It was further recommended to establish five component centres in the developing countries, two of which would be located in Africa.
- Follow-up: It is proposed to hold consultations with the countries of the subregion with a view to obtaining their strong support for the decisions made in Vienna to establish two of the component centres in Africa and to decide on their location as well as to prepare a programme for technical and financial assistance to the host countries in the establishment of the centres. The two countries have gained considerable experience in this field and have agreed to establish the two centres in their countries.

ANNEX IV

SUMMARY INFORMATION ON NEW PROJECTS

A. CORE PROJECTS

Agro- and agro-based industries

1. Establishment of textile industries (Libya/Morocco)

The project is being discussed by the Government bodies concerned in Libya and Morocco. It is anticipated that the details of the co-operation and the drafting of the necessary protocols will be finalized in the near future. The project is principally aimed at meeting the local demand for textile products in the two countries.

2. Establishment of food industries (Libya/Morocco)

The project is likewise being discussed by the Government bodies concerned in Libya and Morocco. The project is principally aimed at meeting the local demand for food products in the two countries. Details are being considered by both parties and it is expected that the necessary protocols will be finalized in the near future.

3. Establishment of leather industries (Libya/Morocco)

The project is also being considered by the Government bodies concerned in Libya and Morocco. The project is principally aimed at manufacturing higher-value added products, using local raw materials (hides and skins), to meet growing domestic demand and to serve possible export markets. Details are being considered by both parties and it is expected that formal protocols will be finalized in the near future.

4. Production of vegetable oil (Sudan/Tunisia/Algeria/Morocco/AIDO)

The objective of the project which is based on the oil-seed production potential of the Sudan is to meet the increasing demand for edible oils in the countries in the subregion. The Government of Sudan (Ministry of Industry) in collaboration with AIDO proposes that the project be established in the Sudan. A detailed study has already been carried out by AIDO and the project has been accepted as a joint project by the AIDO Ministers of Industry. Abundant raw materials and infrastructure are potentially available in the Sudan. AIDO is reported to be carrying out advance promotion. The Government of Sudan also wishes to enter into joint projects with the countries of North Africa on the basis of joint investments in production facilities designed to overcome the acute shortage of edible oil in the subregion. This project offers major potential for co-operation in ensuring subregional food security.

5. Production of fine cotton yarn  
(Sudan/AIDO/Tunisia/Morocco/Algeria/Libya/Iraq/Syria)

The objective of the project which is based on Sudanese cotton resources is to meet the demand in the countries in the subregion. The Government of Sudan (Ministry of Industry) in collaboration with AIDO proposes that the project be established at Port Sudan in the Sudan. A feasibility study has been completed for the plant that would produce

25,000 tons a year (17,000 tons open-end spinning, 4,000 tons carded and 4,000 tons combed). Given the profitability of the project that would serve the whole subregion and its high employment generation factor, it had attracted great interest.

As agreed by its Board, AIDO is also carrying out advance promotion for the project. The project has already been accepted by the AIDO Ministers of Industry as a joint Arab project. The Government of Sudan also wishes to enter into joint projects with the countries of North Africa on the basis of joint investments in production facilities designed to meet the demand for cotton yarn in the subregion. The project offers major potential for subregional co-operation.

#### Building materials industry

##### 6. Nafta el Oued brickmaking plant (Algeria/Tunisia)

This is a joint Algerian-Tunisian project to be set up at Nafta el Oued in Tunisia. A joint company, SOBRINEL, has been established, and production is expected to start in 1989.

#### Chemical industry

##### 7. Establishment of pharmaceutical industries (Libya/Morocco)

The project which is being considered by the Government bodies concerned in Libya and Morocco is designed to enhance their self-sufficiency in basic pharmaceutical and medical products. It is expected that the details will be finalized in the near future.

##### 8. Production of urea nitrate (Libya/Tunisia)

This project is also being considered for discussion between the Governments of Libya and Tunisia. It is designed to enhance their self-sufficiency in chemical products.

##### 9. Production of phosphate fertilizers (Sudan/Tunisia)

It is planned to locate the project at Port Sudan in the Sudan: it is a joint venture between the Governments of Sudan (Ministry of Industry) and Tunisia (Ministry of National Economy, represented by SIAPE - Société Industrielle d'Acide Phosphorique et d'Engrais). A protocol has been drawn up and a proposal prepared by SIAPE is being considered by the Sudanese authorities. Tunisian partners will supply the major raw materials (phosphate) needed to meet the fertilizer needs of the Sudanese agricultural sector. The project aims at manufacturing phosphate fertilizers in the Sudan based not only on phosphate raw materials supplied by Tunisia but also on technical/financial assistance from that country. It is anticipated that a joint company will be established with partners from the Governments of Sudan (Ministry of Industry) and Tunisia (Ministry of National Economy represented by SIAPE) as well as other interested parties to produce over one million tons of phospho-nitrogenous fertilizers and employ over 600 persons.

10. Production of nitro-phosphates (Algeria/Tunisia)

The project is planned jointly by Algeria and Tunisia. No decision has been reached on its location. Technical studies are being prepared prior to implementation.

11. Production of petrochemical products such as acetic acid, bitumen, base lubricants and transformer oils and monovinylacetates (MVA) (Algeria/Tunisia)

The project is under discussion as an idea for joint implementation by Algeria and Tunisia.

12. Production of chemical products such as synthetic glue, titaniumdioxide, pigments and organic colours, mineral colours and pigments, sodium sulphate and barytine derivatives (Algeria/Tunisia)

The project is under discussion as an idea for joint implementation by Algeria and Tunisia.

Engineering industry

13. Manufacture of household washing machines (Algeria/Libya)

The project will be located in Libya. It is designed to meet the local market demand in Libya and to ensure the better utilization of the country's industrial resources and capacities. It will be undertaken by the Public Company for Refrigerators and Stoves (Ministry of Industry, Libya) in collaboration with a counterpart company in Algeria. Implementation is reported to be in progress and arrangements have already been made to the satisfaction of the co-operating companies and their Governments.

14. Production of passenger cars and utility vehicles (Algeria/Libya)

The project will be located in Libya (near Cadamis). It is designed to establish the progressive manufacture of motor cars in Algeria and Libya on the basis of mutual co-operation. Protocols have already been drawn up by the Ministries of Industries in both Governments, covering the planning, design and implementation of the project. The latter stage is reported to have been reached. The designed capacity is 120,000 cars per year. The project is of major industrial and economic significance to the co-operating countries, particularly since it offers major potential for the development and transformation of associated industries based on the manufacture of cars as well as the possibilities for greater co-operation between these and other countries in the subregion. The basic know-how, technology and product design are being sought from the Daewoo Company of the Republic of Korea.

15. Production of gearboxes for automobiles (Algeria/Libya)

The project will be located in Algeria. It is designed to supply products that will increase the local content of the progressive manufacture of automobiles as well as expand the industrial structure in Algeria and Libya, the co-operating countries. The necessary protocols

have been drawn up within the overall context of the production of passenger vehicles. A joint venture company is being established to implement the project(s). The project appears to offer major potential for expanded co-operation between these and other countries of the subregion. It is at a very advanced stage of preparation and features in the annual plan for 1988.

16. Production of high-grade diesel engines for tractors and trucks (Algeria/Libya)

Located in Algeria and with a planned capacity of 7,000 units per year, the project is designed to enhance self-sufficiency and meeting the demand for capital goods in the two co-operating countries, Algeria and Libya. The protocols between the Governments of Algeria and Libya have already been signed and the institutional arrangements made, including the establishment of a joint company. The planning, design and implementation of the project are under way. The project will draw on the experience that Algeria has gained in this field. The project appears to offer good potential for expanding co-operation between the countries in the subregion. It is at a very advanced stage of preparation and features in the annual plan for 1988.

17. Production of light vehicles for desert use (Algeria/Libya)

Located in Algeria, the project will be undertaken jointly by Algeria and Libya. It is designed to expand the scope of the progressive manufacture of automobiles in both countries and to contribute to strengthening their industrial structures. Planned capacity is 10,000 units per year. The protocols have already been drawn up between the two Governments and suitable institutional arrangements made, including the establishment of a joint company to implement the project. The planning, design and implementation are under way. The project appears to offer good potential for expanding co-operation between other countries in the subregion. It is at a very advanced stage of preparation and features in the annual plan for 1988.

18. Aluminium complex (electolytic process) (Algeria/Libya)

The project is a joint Algerian and Libyan venture and is designed to establish the manufacture of aluminium and light industrial products. No decision has been reached on the location of the plant(s). Discussions are in progress. It is expected that the protocols formalizing co-operation between the co-operating Governments and the associated institutional and other arrangements will be finalized in the near future. Investment is estimated at \$60 million.

19. Production of lorries (Libya/Tunisia)

The project is being considered for discussion between the Governments of Libya and Tunisia. It is designed to enhance self-sufficiency in the capital transport equipment. Details are being studied by the parties concerned and discussions will commence soon.



20. Production of high-tension electrical transformers (Algeria/Tunisia)

The project is planned as a joint project between Algeria and Tunisia. It will be located at Kasr-Bokhari in Algeria. A joint company, SOMITRA, has been established and implementation has begun.

21. Construction of metallic structures (Algeria/Tunisia)

The project has been implemented jointly by Algeria and Tunisia in Tunis (Tunisia). A joint company, SOTAC, has been established for this purpose.

22. Manufacture of machinery for sheetmetal work (Algeria/Tunisia)

It is planned to set up this joint Algerian-Tunisian project at Batna (Algeria). A joint company, SOMATOLE, has been established. A technical study is being undertaken.

23. Manufacture of machinery for processing plastics (Algeria/Tunisia)

The joint Algerian-Tunisian project is to be set up at Setif (Algeria). A joint company, SOMIPLAST, was established in September 1987. The project is progressing normally and a tender has already been issued.

24. Production of textile machinery (Algeria/Tunisia)

Algeria and Tunisia are planning to set up the joint project in Tunisia. A technical study is being undertaken by the joint company, MTM, established for this purpose. The project is progressing normally and a tender has already been issued.

25. Manufacture of gears and reduction gears (Morocco/Tunisia)

Morocco and Tunisia are planning to set up the joint project in Tunisia. Production is expected to start in the course of the current year.

26. Industrial forge project (Morocco/Tunisia)

A joint Moroccan-Tunisian venture, the company has been established in Morocco. Production is expected to start in March 1989.

27. Production of thermostats, evaporator sheets, heat exchangers, cooking stoves, micro-motors, control panels, TV cassettes, and printed circuits (Algeria/Tunisia)

The project is being discussed as an idea for joint implementation by Algeria and Tunisia. Studies have already been undertaken in respect of some of the products and would be discussed at the upcoming meeting of the two countries' joint committee. It is worth noting the wide range of products are already being produced in the subregion. Egypt, for example, was currently assembling TV sets (colour and monochrome) to the annual value of \$200 million. AIDO is also actively promoting a study on the manufacture of telephone switchboards

in the Maghreb region. Detailed feasibility studies on increasing the domestic content in the production of televisions had, however, confirmed the viability of the project for which the participation of interested parties was being sought.

28. Production of pistons, gudgeon pins, casings, sleeves, bearings and transmission chains (Algeria/Tunisia)

The project is being discussed for joint implementation by Algeria and Tunisia. In respect of a related joint Libya/Algeria project, consideration is being given to transform it into a tripartite project by adding Tunisia.

Metallurgical industry

29. A joint steel complex (Algeria/Libya/Mauritania/Morocco)

The objective of the project is to enhance self-sufficiency in steel products. The project is being considered for discussion between the Governments of Algeria, Libya, Morocco and Mauritania.

**B. SUPPORT PROJECTS**

1. Joint Tunisian/Libyan company for industrial maintenance and assembly

2. Study on the promotion of capital goods manufacture in North Africa

It was requested that UNIDO' in co-operation with AIDO, CEIM and other relevant organizations, should assist in the preparation of a subregional market study that would identify the capital goods production capability of each country, based on a survey and feasibility studies relating to the different core industrial subsectors.

3. Technical studies on the promotion of subregional co-operation in the fish-processing industry

Given the need to draw up a plan for improving the fish-processing industry and in the light of earlier studies carried out by UNIDO relating to that sector, UNIDO was requested to provide, in co-operation with the relevant subregional organizations, all the assistance necessary for studies that would focus on two specific issues: (i) the modernization of that sector with a view to improving processing capacity and product valorization; and (ii) the modernization of the processing, preservation and distribution methods, particularly in rural areas.

4. Technical studies on the promotion of a subregional marine repair and maintenance industry

In the interests of ensuring the harmonious and efficient utilization, in co-operation with the relevant subregional organizations, of halieutic resources and maritime transport, UNIDO was requested to provide the assistance necessary for technical studies that would focus on establishing a marine repair and maintenance industry based on pilot projects located throughout the region.

5. Technical studies related to industrial pollution

Given the serious situation facing the coastal regions of North Africa arising out of the inordinate and hazardous effluents in the Mediterranean Sea, due not only to the urban and industrial waste of the countries on the northern shores, but also to the fact that 45 per cent of the world's oil was transported across this semi-closed sea, it was essential to contain environmental pollution. Given the gravity of the situation, UNIDO was requested to assist the countries in the subregion in carrying out technical studies on the reduction or avoidance of pollution.

6. Subregional consultations on specific sectors

In view of the need to avoid the duplication of projects, it was considered essential to introduce some form of consultative mechanism. Consultations, it was proposed, should initially be held on the following sectors: industrial equipment; textiles, including synthetic fibres; industrial engineering and maintenance; leather; iron and steel; complementary industries such as the automotive industry; agro-food industries; the electrical and electronic industries and chemical and petrochemical industries. The consultations, which should also be organized by UNIDO, AIDO and CEIM and attended by banking institutions such as the ADB, would facilitate the elaboration of national strategies and pave the way for effective industrial integration in the subregion.