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Subregional Follow-up Meeting on the Initial Integrated  
Industrial Promotion Programme within the Framework  
of the Industrial Development Decade for Africa\*

Bujumbura, (Republic of Burundi), 8 - 10 January 1986

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

Prepared by  
the secretariats of ECA, OAU and UNIDO

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\* Organized jointly by ECA, OAU and UNIDO in co-operation with the Government of Burundi and the Central African Customs and Economic Union (UDEAC).

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## INTRODUCTION

### Objective of the report

1. This paper has been prepared in connection with the subregional follow-up meeting on the initial integrated industrial promotion programme within the framework of the Industrial Development Decade for Africa. It presents an operational and accelerated programme of action for subregional co-operation between the countries of Central Africa. In the process of preparing this report, assistance was given to the secretariats of the Central African Customs and Economic Union (UDEAC) and the Economic Community of the Great Lakes Countries (CEPGL) in reviewing the initial programme and projects as well as the mechanism for their implementation.

### 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 adopted at the subregional meeting held at Bangui in February 1984. The third chapter assesses the current status of implementation of that Programme. The fourth chapter outlines a revised integrated industrial promotion programme, while a strategy for accelerating the implementation of the proposed revised programme is suggested in the fifth chapter.

## CHAPTER I

### I. INDUSTRIAL CO-OPERATION IN THE SUBREGION

#### Historical background

3. The population of the 11 countries in the subregion, most of which gained independence in the 1960s, totalled 62.7 million (or 14.8 per cent of the total population of the OAU Member States) in 1980, with forecasts of some 84.5 million by 1990 and 112.7 million by the end of the century.

4. The countries in the subregion possess a large resource base: this offers an enormous potential for industrialization and thus needs to be efficiently exploited and developed. The agro-industrial resources include timber, coffee, tea, sisal, cotton, meat, hides, fish and sugar. The mineral resources are mainly: aluminium (Angola, Cameroon and Zaire); iron (Angola, Cameroon, the Central African Republic, the Congo and Zaire); manganese (Angola, Gabon and Zaire); nickel (Burundi and Zaire); chromium (Zaire); cobalt (Zaire); tin (Rwanda and Zaire); phosphates (Angola, Burundi, the Central African Republic, the Congo and Zaire); and petroleum (Angola, Cameroon, Chad, the Congo, Gabon and Zaire). Energy resources include natural gas, methane gas, coal, Jurassic oil shale, heavy oil and tar sands, as well as hydro-electricity. Also available in the subregion are human resources for which, after 25 years of independence, many Member States had developed important training programmes which had led to the availability of an élite trained in new developmental techniques that was often not mobilized in the service of regional industrialization.

5. During the period 1975 - 1980, the gross domestic product (GDP) of the subregion rose from \$6,170 million to \$6,475 million; this corresponds to a subregional growth rate of only 1 per cent as against a regional growth rate of 5.6 per cent. The average per capita income dropped from \$131 to \$122: an annual drop of -1.4 per cent. During the same period, the share of agriculture in the GDP fell from 33 to 31 per cent, while that of manufacturing remained unchanged at 25 per cent; the share of the tertiary sector rose from 42 to 44 per cent.

6. Most of the countries' economies are mainly oriented towards agriculture, involving the production of raw materials and primary commodities, most of which are exported unprocessed. Similarly, some of the countries still depend heavily on the export of mineral products either in unprocessed form or after primary processing: the main objective of these exports being to earn foreign exchange. The countries depend on external sources for most factor inputs such as capital goods, intermediate goods, technology, finance and services. They also depend on huge food imports. As a result of these and other factors, the subregion's economies are acutely vulnerable: this stems mainly from its dependence on the export of a limited number of primary commodities whose fluctuating and rather relatively low prices are determined externally, as well as on the import of increasingly expensive industrial factor inputs.

Industrial structure

7. The industrial structure of the countries in the Central African subregion does not match their huge resource endowments. The bulk of the manufacturing industry is devoted to the production of non-durable consumer goods which require only simple processing. Although in certain countries there are large-scale or multinational production units, the manufacturing sector most often comprises industries whose size make it impossible to realize economies of scale. Largely agro-based, the production of consumer goods is confined to the processing of primary (light industry) products such as textiles, footwear, leather products, food and beverages. By way of example, light industries accounted for 86 per cent of manufacturing output in 1976 in the Central African Republic and for 89 per cent in 1977 in Rwanda. Moreover, the production of food, beverages and tobacco alone accounts for a large share in manufacturing output of the Central African countries: not less than 50 per cent in the Central African Republic in 1980.

8. The development of heavy industry has not met with success in the Central African subregion, constrained as it is by a number of factors, including the size of the individual countries' markets and their lack of technical and managerial expertise. The history of several metallurgical projects in Zaire illustrates the difficulties encountered by the countries in the subregion: a steel plant at Maluku which was designed to use energy from the Inga dam is currently operating at only 3 per cent capacity, while a copper and cobalt refinery project has been abandoned.

9. Government participation in manufacturing has increased in most countries irrespective of their political orientation. This trend is attributed to the need to compensate for shortcomings in local private entrepreneurship. In countries, such as the Congo, the public sector is the most important participant in manufacturing and accounts for more than half of the sector's output. However, many State-owned enterprises have incurred heavy losses, owing to such factors as overmanning, underpricing of production and ineffective management. All too often they have not been regarded as commercial ventures which must cover their costs and produce a return on investment, but as social organizations designed to provide jobs and services. In countries such as Zaire, previously "nationalized" industries have even been returned to their former (foreign) owners.

10. Manufacturing in the subregion is concentrated in or around the major cities: it usually has little or no impact on rural development. Indeed, manufacturing is geared mainly towards meeting the requirements of a comparatively small section of the urban population.

11. Manufacturing in the subregion is mostly import-based and poorly linked to agriculture and other economic sectors. The share of manufacturing in the subregion is small, both in absolute terms and in terms of its contribution to GDP. In 1970, the average share of manufacturing value added (MVA) in GDP at constant 1970 prices in the subregion was only 7 per cent as against 9.5 per cent for the whole of Africa. In 1980, it rose to 8 per cent as compared to 9.8 per cent for the whole region. These average figures conceal disparities in performance between the countries in the subregion, as can be seen from the table below:

Shift in the share of manufacturing in GDP, Central African subregion  
(per cent)

	<u>1970</u>	<u>1980</u>	projection <u>1985</u>
Angola	5.2	4.9	3.2
Burundi	6.8	7.8	12.7 <sup>a/</sup>
Cameroon	10.0	9.1	11.4
Central African Republic	13.1	14.0	10.5
Chad	5.5	5.2	7.0
Congo	6.6	5.2	6.9
Equatorial Guinea	3.8	4.2	5.0
Gabon	4.2	10.2	9.2
Rwanda	3.5	12.2	13.45
Sao Tome and Principe	4.8	5.2	-
Zaire	7.6	6.5	6.0

Source: Economic Commission for Africa, Statistics Division

a/ Ministry of Planning, Burundi: 3.0 (1970), 4.5 (1980) and 7.1 (1985)



12. Industrialization in the subregion is hampered by a number of constraints, including the inadequate supply of raw materials resulting from both the poor agricultural performance and the unsuccessful development of mineral resources that continue to be exported unprocessed. In addition to these factors, the other constraints upon industry in the subregion include:

- (a) Lack of critical raw material inputs for national industries working within limited domestic markets;
- (b) Inadequate foreign exchange restricting the procurement of external factor inputs, such as spare parts, raw materials, intermediate products, technology, know-how and services;
- (c) Lack of manpower capable of handling complete project cycles, including project planning, implementation and operation, or negotiating the procurement of technology and finance;
- (d) Inadequate domestic financial resources and limited foreign investment in industry;
- (e) Inadequate infrastructural facilities, including energy;
- (f) Ineffectiveness of operational measures for pooling resources and establishing basic industries at the multinational and subregional levels;
- (g) Inadequate access to and development of technology and subsequent inability to compete in international markets for semi-finished and finished products;
- (h) Inadequate priority given to industry by Governments when allocating resources and establishing development policies, programmes and projects.

13. As a result of the above, the countries in the subregion are heavily dependent on external factor inputs for their industrialization, the pattern of which continues to be outward-looking.

#### Industrialization strategies and policies in the subregion

14. Over the years, the industrialization policies of the subregion have been geared mainly towards the promotion of import substitution and the manufacture of consumer goods. Although import substitution is not fundamentally bad, it should not be predicated upon the importation of raw materials and components, and should not, as is often the case, be a mere assembly operation which does not contribute to the upgrading of indigenous

resources nor to the development of technological potential. Hence in most countries, the establishment of import substitution industries has provided neither support for agricultural development nor effective linkage between the various sectors of the economy. Rather, it has worsened the fragility of national economies which are already extremely susceptible to fluctuations in the prices of raw materials and imported finished goods.

15. These policies have merely prolonged the dependence of the subregion on external sources, while the creation of capital-intensive import-substitution industries (with a high unit cost of investment and no relationship to the factor endowments of the subregion) has distorted cost structures. In many instances, domestic production costs are higher in terms of foreign exchange than the cost of importing finished products. Furthermore, the economic situation of the subregion has deteriorated following the outflow of capital from the subregion to the developed countries in return for commodity and technology imports, repatriation of dividends and consultancy fees.

#### Subregional co-operation

16. The current economic situation calls for fundamental structural change and a rejection of the traditional fragmented approach to planning adopted in the past, which was dominated by import-substitution strategies. 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 single countries cannot dispose of all the technological and manpower capabilities needed to establish certain industries. Since most of the countries in the subregion have neither all the raw material inputs needed to establish certain industries nor the markets to absorb the expected output, industrial co-operation would permit these countries to deploy their resources to the maximum possible advantage.

17. Similarly, industrial co-operation would also ensure raw material producers in the subregion protected access to the larger subregional market, thus making for the optimal utilization of the agricultural, 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. The steps to be taken by each country, ranging from the identification of core projects at the national and subregional levels to the detailed assessment of financial requirements, are spelt out in detail in the programme for the Decade.

#### Institutional arrangements

18. Of the multilateral and bilateral industrial co-operation mechanisms in the Central African subregion, the three most important multilateral economic co-operation bodies are the Economic Community of Central African States (ECCAS), the Customs and Economic Union of Central Africa (UDEAC) and the Economic Community of the Great Lakes Countries (CEPGL).

#### The Economic Community of Central African States (ECCAS)

19. The Community, whose membership corresponds to the eleven countries of the subregion, was established in October 1983 with the main objective of promoting self-reliant and self-sustained economic development in the subregion, so as to satisfy the peoples' needs and reduce the countries' external overdependence. As reflected both in the treaty and in protocol IX on industrial co-operation, industry is given high priority in the economic community. The main thrust lies in the establishment of multinational industries based on local resources and other factor inputs so as to stimulate an economic development process based on the twin principles of self-reliance and self-sustainment, the strategy propounded in the Lagos Plan of Action. The priority industrial subsectors are basic industries such as iron and steel, capital goods and engineering as well as those producing fertilizers, pharmaceuticals, pesticides and petrochemicals, and a number of multinational industrial projects have already been identified in the subregion within the framework of such bodies as UDEAC, CEPGL and the Yaoundé- and Gisenyi-based MJLPOCs (Multinational Programming and Operational Centres).

#### The Customs and Economic Union of Central Africa (UDEAC)

20. UDEAC, whose current members are Cameroon, the Central African Republic, Chad, the Congo, Equatorial Guinea and Gabon, was established in 1964 with the global objective of strengthening regional solidarity, creating a common

market, eliminating trade barriers and raising the living standards of its peoples. In the field of industrialization, the UDEAC treaty stipulates three industrial co-operation objectives: the harmonization of industrial policies, the equitable distribution of joint ventures and the co-ordination of industrial development sectoral plans. Those plans aim at promoting industrial growth, specialization and diversification, the optimal exploitation of available resources, increased productivity and efficient utilization of factor inputs, economies of scale, equitable distribution of benefits and balanced regional development.

The Economic Community of the Great Lakes Countries (CEPGL)

21. The community, which encompasses Burundi, Rwanda and Zaire, was established in 1976. The economic objectives include the promotion of co-operation in the design, formulation, preparation and implementation of joint ventures and other activities in various economic sectors including industry so as to meet the needs of the people and ensure the optimal exploitation of the natural resources available in the Member States. A number of industrial projects have already been implemented and new projects identified, while studies are being carried out on the expansion and rehabilitation of certain national units in order to give them a community character.

22. The establishment of ECCAS, UDEAC and CEPGL, whose objectives are fully in line with those of the Lagos Plan of Action, the Final Act of Lagos and the programme for the Industrial Development Decade for Africa, not only reflect the political commitment of the Member States, but they have also laid the foundation for the integrated development of the Central African subregion.

23. All the foregoing suggests that the will for increased industrial co-operation exists. However, in a community of states such as ECCAS, UDEAC and CEPGL there is the need to foster economic development in more practical terms than hitherto through a greater sense of interdependence than is customary in other forms of international co-operation. There is also evidence that the lack of progress is due more to such things as insufficient political will and inadequate vehicles for implementing decisions. These include poor industrial infrastructure and auxiliary institutions, as well as

the lack of practical commitment and a properly co-ordinated approach to overcoming at least some of the existing structural and policy problems arising out of national industrialization efforts in the post-independence period. The renewed efforts that are being made to raise the level of industrialization in the subregion through community-level actions should take these factors into consideration.

The Industrial Development Decade for Africa (IDDA)

24. 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. 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 in concert with national development plans and aspirations.

25. Implementation of the programme also presumes a greater and effective mobilization of the countries' resources, close 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.

26. 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.

27. 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. 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. The establishment of an information system would 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

### THE INITIAL INTEGRATED INDUSTRIAL PROMOTION PROGRAMME FOR CENTRAL AFRICA

28. The advent of the IDDA has lent new impetus to subregional co-operation. In keeping with the need to promote subregional co-operation, an expert group meeting on the promotion of industrial co-operation in Central Africa within the framework of the IDDA programme was held at Bangui, Central African Republic, 18-22 February 1984. The meeting was organized by UNIDO, in co-operation with OAU, ECA, ECOWAS and the Government of the host country. The meeting adopted an Initial Integrated Industrial Promotion Programme (document ID/WG.414/3/Rev.1) consisting of selected priority industrial projects for increased co-operation at the subregional level. The meeting also considered the modalities of implementing the projects selected.

29. In addition to the representatives of States from the subregion, the following agencies/organizations were represented at the meeting: African Development Bank (ADB), Central African Development Bank (BDEAC), the Economic Community of Central African States (ECCAS), the Economic Community of the Great Lakes Countries (CEPGL), the African Intellectual Property Organization

(OAPI), Common African and Mauritian Organization (OCAM), the Pan-African Telecommunications Union (PATU), the Central African Customs and Economic Union (UDEAC), the Yaoundé-based Multinational Programming and Operational Centre (MULPOC), the Gisenyi-based Multinational Programming and Operational Centre (MULPOC), the Union of African Railways (UAR), the Organization of African Unity (OAU) and the Economic Commission for Africa (ECA).

Priority core subsectors

30. The meeting, in selecting the projects to be included in the subregional programme, accorded priority to projects that contributed, either directly or indirectly, to the subregion's self-sufficiency in food production, as well as to those with upstream and downstream linkages. In this respect, a strategy for the subregion focusing on agro-based and agro-related industrial projects that had already been developed by the intergovernmental organizations (IGOs) was emphasized in order to secure greater political support. This strategy implied equal priority for certain complementary subsectors which provided inputs to agro-based projects. Consequently, the major priority subsectors identified in the Initial Integrated Industrial Promotion Programme were:<sup>1/</sup>

(a) Agro- and agro-based industries

This subsector was to be given priority when allocating resources so that the basic needs of the people could be met and the degree of self-reliance increased by reducing the import content and supplying locally available inputs in adequate quantities. The initial subregional programme called for increased processing of agricultural produce as well as greater production and use of fertilizers, pesticides and agricultural machinery (in order to enhance agricultural production). It also emphasized the need to establish suitable integrated processing, storage and preservation facilities.

(b) Building materials industry

Basic needs such as shelter and infrastructural development are closely linked with other subsectors of the economy. The initial subregional programme therefore called for the intensified production of certain strategic materials such as cement and the need for research into the greater use of local raw materials.

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<sup>1/</sup> The listing of these priority sectors in alphabetical order does not imply the setting of priorities within those priorities as it would be difficult to find priorities applicable to all countries. Given the continuous nature of the industrialization process, countries can determine for themselves the priorities they wish to set, opting, for example, to promote sectors that have linkages with agriculture

(c) Chemical industry

The initial subregional programme stressed the need to develop production facilities for certain priority chemicals such as fertilizers and pesticides, which are essential to improved agricultural yields, as well as petrochemicals, other chemicals and pharmaceuticals, especially those which can be extracted from local resources and medicinal plants. Here again, the need for co-operation and the formation of multinational corporations was emphasized as a means of mobilizing resources on a subregional basis.

(d) Engineering industry

The development of the engineering industry was seen to be essential as it offered a means of enhancing the development of technology and providing the requisite machinery, equipment, spare parts and components for the development of the agricultural sector.

(e) Metallurgical industry

The subregion is endowed with large quantities of valuable metallic and other minerals which are not fully exploited. At best, the few minerals exploited are being exported with little or no processing. This subsector could become a major foreign exchange earner and save the subregion a considerable amount of money at present being spent on importing a wide range of processed metallic products. It could also become the foundation on which to build a wide range of industries producing goods for local consumption and export. It is not surprising therefore that the initial subregional programme placed high priority on the development of this subsector, in particular the development and/or rehabilitation of the iron and steel, tin and aluminium industries. Great importance was also attached to co-operation in their development in view of the high cost of the technology involved and the need to secure adequate markets.

31. The identification and selection of core projects in these priority sectors are based on the principle of attaining self-reliance and self-sustained industrialization. Consequently, any projects selected must meet basic domestic needs, act as stimuli to other sectors of the economy and enhance the development of the requisite local capabilities. In short, the projects must ensure the full and effective utilization of local natural resources, have strong linkages with established industries, create employment and disseminate technological know-how. The linkage and complementarity factors need to be projected at both the national and subregional levels. In the long term, it is expected that this policy will not only enhance industrialization, but also accelerate the local production of inputs for other sectors and lead to the gradual development of capital goods industries in the subregion. The criteria governing the selection of subregional



projects, which were discussed and adopted at the Bangui meeting and endorsed by the African Ministers of Industry, are attached as Annex I.

32. The core industry concept developed in the programme for the Decade was also examined in some detail and incorporated into the basic strategy of the initial programme. Consideration was given to factors such as availability of markets, raw materials, training facilities, equity participation and management cadres - all at the community level. It was also decided to evaluate the projects selected within the context of the changing priorities and requirements of the subregion, as well as within the framework of the programme for the Decade.

#### Areas and services supporting industrial development

##### Agriculture

33. Although agriculture still remains the major source of employment, food, industrial raw materials and foreign exchange for the majority of countries in the subregion, its recent decline has had to be offset by substantial imports of food which increase the drain on limited foreign exchange reserves. Fluctuating performance in the agricultural sector is due to the vagaries of weather, in particular drought, locust raids, inadequate price policies, poor farming methods and problems related to the procurement and distribution of agricultural inputs. Additional difficulties in the subregion are the loss of livestock and encroaching desertification, culminating in the alarming fact that the subregion is unable to feed itself. The steep increase in the import of food grains into the subregion is contrary to the concept of self-reliance contained in the Lagos Plan of Action.

34. Furthermore, the neglect of agriculture has led to foreign exchange shortages and a reduced investment surplus so that many industries now face difficulties in obtaining imported spare parts or finding adequate financing for investment. This situation must be corrected so as to allow for a transformation of the present negative linkages between industry and agriculture into positive ones and for industry and agriculture to grow together in harmony.

### Energy

35. Most countries in the subregion depend on imported oil<sup>2/</sup> to meet their energy needs, particularly in the transportation and industrial sectors. Some are endowed with oil and other important sources of energy, such as natural gas, coal, peat and hydroelectric power (though still underexploited), as well as new and renewable sources of energy, the development of which will require major investments far beyond the scope of individual countries. Given this situation, it is foreseen that the subregion will continue to depend on oil as a major source of energy and it will need to intensify co-operation in the development and utilization of its energy resources.

### Water

36. The subregion has an abundance of water in the form of numerous lakes and rivers, as well as the ocean. Properly exploited, these water resources could provide suitable zones for the development of industrial complexes as well as irrigation schemes.

### Trade

37. Trade between the countries in the subregion is negligible compared with total trade with countries outside Africa. The factors contributing to this low volume of trade within the subregion include:

- (i) The underutilization of compensation arrangements in the Central African subregion, primarily the non-participation of certain countries in the subregion, and the lack of requisite information of economic agents;
- (ii) Inadequacy of communications;
- (iii) Paucity and/or inadequacy of information on markets and manufactures available in the subregion;
- (iv) Presence of tariff and non-tariff barriers aimed at protecting local markets;

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<sup>2/</sup> Local refining capacity is limited and the bulk of locally produced petroleum is exported as crude.

- (v) Inefficiency of, and lack of co-operation between, such institutions as chambers of commerce;
- (vi) Lack of surplus industrial products for export; and
- (vii) Lack of production complementarity among countries in the subregion.

However, the obstacles can be overcome and economic interdependence between the countries in the subregion enhanced through the vehicle of such economic groupings as ECCAS, UDEAC and CEPGL. The intergovernmental organizations and Governments in the subregion have placed particular emphasis on promoting trade within the subregion, and numerous bilateral and multilateral agreements have been concluded between countries in the subregion.

#### Transport and communications

38. The transport and communications system in the subregion will have to be improved significantly, given its importance to accelerating the process of development and supporting the subregional industrial promotion programme. At present, transport and communications in the subregion feature several constraints which impinge negatively upon the economic integration of the subregion. These constraints include:

- (i) The external orientation of the present system which is not commensurate with domestic needs since it is essentially designed to suit external requirements;
- (ii) The relative isolation in which Member States still find themselves because of inadequate inter-State links (no road-rail links, in particular);
- (iii) Difficulties in operating the present system, owing to poor maintenance as well as the dilapidated state of both the infrastructure (roads, railways, ports, harbours and airports) and equipments;
- (iv) Shortage of skilled manpower; and
- (v) Lack of co-ordination between the different means of transport and disparities in fares which affect inter-State trade adversely, etc.

39. Given the external orientation of both the transport and communications systems, improvements are called for and imbalances need to be rectified so as to reduce the dependence of the countries in the subregion on external countries. The relatively high cost of constructing and equipping certain

central infrastructural facilities such as ports and their impact on other means of transport make their joint development and utilization indispensable. Subregional initiatives are therefore necessary in order to rationalize usage of the various transport and communications facilities at the regional level, as part of the guidelines set out in the Lagos Plan of Action and the Programme for the United Nations Transport and Communications Decade for Africa.

#### Human resources

40. The implementation of the integrated industrial promotion programme, similar to 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 disposes of adequate human resources; their training and skills, however, are wanting. University courses and industrial needs are mismatched as are vocational training opportunities, there being only an infinitesimal number of courses aligned to the requirements of the priority subsectors, support areas and services. This merely perpetuates reliance on expatriate technicians.

41. Although the educational infrastructure must be expanded, more immediate improvements could be obtained by rationalizing current programmes and strengthening their links with industry. New forms of education involving the rural population and women, new teaching/learning processes and, above all, recognition of science and technology as fundamental components in self-reliant and self-sustained industrialization: all these are essential to the effective development of human resources.

#### Mobilization of financial resources

42. Implementing the projects retained 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 most countries in the subregion, the investment of domestic resources is inadequate and 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. Particular attention should be paid to the better preparation of bankable projects and feasibility studies. The assistance of such organizations as UNIDO is required in this regard.

### Technology

43. 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.

44. It should be noted that most countries in the subregion do not dispose of the personnel, in quantity or quality, to evaluate, acquire, adapt, diffuse and absorb foreign technologies, which is a highly technical and sophisticated discipline. Only very few countries have taken steps to develop the institutional machinery needed to promote the development and upgrading of local technology or the acquisition and regulation of foreign technologies. In many countries, Government agencies and private enterprises have been left to their own devices or given biased advice when deciding whether to invest in technology. As a result, they have purchased defective products or plants that were reconditioned or overpriced, technologies that were inappropriate in

terms of labour, capital or resource endowments, or processes unsuited to local raw materials or environment. Action should thus be taken to control such deficiencies as: (i) inadequate purchasing and procurement policies; (ii) lack of information on sources and prices of major factor inputs and technologies; and (iii) disorganized negotiating and contractual practices. Consequently, particular emphasis must be placed on mastering the assessment, selection and transfer of technology and its acquisition through appropriate policies and practices.

#### Industrial institutional infrastructure

45. The successful implementation of the subregional programme will require the better utilization, strengthening or the development of an effective industrial institutional infrastructure which, at present, is inadequate in most countries. Certain institutions exist at the national level, but they rarely suffice to cover all the critical functions essential to a major forward thrust. These functions are outlined in that 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.

#### Strategy for implementation

46. It is pertinent at this juncture to re-state some of the clearly stressed modalities adopted at the Bangui meeting for the implementation of the programme. These include:

- The need to identify clearly priority subsectors or branches. Given the limited amount of available resources, the selection process and the establishment of priorities constitute a sine qua non;
- The need for 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;

- The need to accord priority to projects developed by IGOs in view of their greater political support;
- The need for an agreed integrated, realistic and well articulated programme to be matched with concrete proposals for implementation;
- The need for national governments to incorporate relevant aspects of the programme in their national development plans and to establish National Co-ordinating Committees, as well as operational focal points to be provided with adequate staff and funds;
- The adoption of a short- and long-term approach to the preparation and implementation of the programme;
- The need for those countries selected to host projects to play an effective leadership role;
- The need for intensified consultations between countries, IGOs and other relevant subregional institutions leading to firm negotiations on each project;
- The involvement of the private sector;
- The need to establish subregional machinery (subregional and subsectoral committees) to monitor and evaluate the implementation of the programme and projects at every stage; and
- The crucial co-ordinating role of the IGOs.

### 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 Central Africa adopted at the subregional meeting in February 1984, comprised 24 investment projects in five core areas and 13 support projects covering institutional infrastructure, manpower development and other areas. Annex II provides details on the status of implementation of the initial programme. Column 4 indicates the time-frame adopted at the Bangui meeting for the implementation of the project while column 5 describes the progress achieved since January 1984. It thus transpires that, although several countries and project sponsors have taken a variety of follow-up actions since the Bangui meeting,

none of the 24 investment projects has reached the implementation stage. Significant action was however taken in respect of the 13 support projects contained in the initial programme.

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

48. On the whole, progress towards the implementation of the Initial Integrated Industrial Promotion Programme for Central Africa has been very limited. This is due to a number of reasons. Some of the projects did not correspond to national priorities and were not well thought out before submission. Many were submitted on the spur of the moment, with little consideration given to the exigencies of integration or to the implications and problems of implementation. As a result, many of the projects were submitted without preliminary studies and adequate data, and no serious consideration was given to the evolution of certain projects. The selection and location of projects were governed by considerations other than economic, thus making it difficult to mobilize financing. Furthermore, communications between the member countries and with the IGOs leave much to be desired; steps must be taken to improve communications between countries and elicit prompt responses. 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

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

- Balance of payment problems which have led to acute shortages of virtually all the necessary imported industrial inputs;
- 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;
- Food shortages, in varying degrees, which in some countries has posed the threat of starvation;



- An external debt crisis;
- The need to maintain political stability; and
- Poor management of an invariably overwhelming public sector that has also penetrated areas that are better left to the private sector.

50. The strategies and policies that have been adopted bear no direct relation to the subregional programmes or its objectives. Indeed, many of the protectionist policies contravene agreed subregional policies. However, with the assistance of the World Bank and the International Monetary Fund (IMF) and the crushing effect of the debt crisis, many of the policies and strategies are fast becoming more corrective than 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.

51. 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.

52. Although many of the projects submitted to the Bangui meeting were listed in the countries' national plans, there is no evidence of consultations having been held on development planning, policies and strategies. Most regrettably, in all the corrective measures being formulated by the World Bank or IMF in certain countries in the subregion, little reference is made or consideration given to subregional industrial policies and strategies, nor to the development of linkages between industry and other sectors of the economy in the subregion. On each occasion, they have limited their perspective to the economy of the country they are examining at that particular juncture.

53. 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 re-activating existing projects which analyses show are capable, once re-activated, of yielding satisfactory economic and financial returns.

54. 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 simply not available. In the drought-stricken countries, the entire meagre resources are diverted towards securing food and agriculture. In others, 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

55. At the subregional level, a number of industrial policies and strategies have been adopted under the aegis of ECCAS, UDEAC and CEPGL. These relate to: priority areas of co-operation and project development; establishment of national structures to follow up on policies adopted; criteria for project selection; level of participation in equity capital; mobilization of the population towards integration; and the development of programmes through specialization including technology, training and technical assistance.

56. The most serious constraint seems to be the lack of financial and human resources. The subregional organizations entrusted with the responsibility for studies were not accorded the necessary budgetary allocations for that purpose. While the organizations have endeavoured to mobilize financing from financial institutions and bilateral technical assistance bodies, it has not, however, been possible to bring together all the necessary funds. Furthermore, in the case of UDEAC, after entrusting it with the responsibility for seeking financing for studies and for carrying out project preparation, the states withdrew that mandate in 1975 and restored it only in 1984.

Subregional institutional arrangements for promoting industrial co-operation

57. The structure and resources of the secretariats of the IGOs, particularly those dealing with industrial development, need to be enhanced so as to provide efficient administrative and specialist services. Perhaps the establishment of a well staffed Department of Industry as a single organizational entity within these secretariats is overdue. The economic crisis mentioned above has also seriously affected those organizations, since all Member States have not been in a position to meet fully their financial commitments.

58. In addition to the intergovernmental organizations, a number of sectoral or bilateral and multilateral arrangements lack any permanent or physical structures. As mentioned earlier, these organizations need to be streamlined in order to avoid unnecessary bottlenecks, duplication and waste of resources. The establishment of a permanent consultative machinery among ECCAS, UDEAC, CEPGL and subregional development finance Institutions in Central Africa would be a step in the right direction. Moreover, by virtue of its membership, ECCAS would obviously be in the best position to ensure co-ordination.

CHAPTER IV

PROPOSALS FOR A

REVISED INTEGRATED INDUSTRIAL PROMOTION PROGRAMME

Selection of core subsectors and investment projects

59. The priority subsectors identified in the Initial Integrated Industrial Promotion Programme for the subregion comprise: agro- and agro-based industries, building materials industry, metallurgical industry, chemical industry and engineering industry. A number of areas and services supporting industrial development were also accorded priority in the programme. These include agriculture, natural resources, energy, manpower development, technology, industrial financing and institutional infrastructure.

60. In order to ensure the effective implementation of the initial integrated industrial promotion programme, it is recommended that attention should focus on the core subsectors and the areas listed in that programme. The attainment of the objectives of self-sufficiency and self-sustaining economic development hinges on the development of priority core subsectors and areas.

61. In the light of the above and the assessment made 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 have thus been 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.

62. The revised programme contains 25 core projects and nine support projects. Basic information on each project is contained in the project profiles attached as Annex III.

#### CORE PROJECTS

##### Engineering industry

##### Agricultural machinery and equipment subprogramme

##### First priority

- (1) Manufacture of agricultural equipment and machinery, Rwanda

##### Precision engineering subprogramme

##### First priority

- (2) Manufacture of watches and watch components, Central African Republic

Chemical industry

Fertilizer subprogramme

First priority

- (3) Exploitation of methane gas from Lake Kivu, CEPGL (a composite project derived from projects 15, 19 and 20 of the initial programme)
- (4) Production of phosphate fertilizers, Burundi

Pharmaceuticals subprogramme

First priority

- (5) Establishment of a laboratory for pharmaceutical products, Central African Republic
- (6) Establishment of a pharmaceutical plant, Burundi

Other chemicals subprogramme

Second priority

- (7) Upgrading potash deposits for the manufacture of chemicals, Congo
- (8) Production of calcium carbide, Rwanda

Pesticides subprogramme

First priority

- (9) Production of active ingredients for pesticides, Rwanda

Petrochemicals subprogramme

Third priority

- (10) Establishment of a petrochemical complex for the manufacture of plastic products, Gabon
- (11) Expansion of a petroleum refinery, Congo

Agro- and agro-based industries

Food-processing subprogramme

First priority

- (12) Rehabilitation and extension of the sugar industry, Angola
- (13) Upgrading of a sugar factory, Congo
- (14) Establishment of a distillery, Burundi
- (15) Community dairy products project, CEPGL

Second priority

- (16) Establishment of an agro-industrial complex processing cassava, Central African Republic
- (17) Integrated development of the fish-processing industry, CEPGL

Forest products subprogramme

Second priority

- (18) Establishment of a wood-processing complex, CEPGL

Building materials industry

Cement subprogramme

First priority

- (19) Expansion of the Loutete cement plant, Congo  
(20) Reactivation of the Katana cement plant, Zaire

Third priority

- (21) Expansion of the Mashyuza cement plant, Rwanda

Non-metallic mineral products subprogramme

Second priority

- (22) Expansion and diversification of production at a glass manufacturing plant, Congo

Metallurgical industry

Aluminium subprogramme

Third priority

- (23) Integrated development of the aluminium industry, Cameroon

Iron and steel subprogramme

Second priority

- (24) Rehabilitation of the Maluku steel plant, Zaire

Tin subprogramme

Second priority

- (25) Expansion of a tin plant, Rwanda

63. In addition to the above-mentioned core projects, it is proposed that a number of subsectoral studies should be carried out in the following priority subsectors:

- Meat and cattle products industry
- Aluminium industry

- Wood and wood products industry
- Iron and steel industry
- Petrochemical industry

64. The preparation of each study should be entrusted to one subregional organization, which should be provided with the necessary resources to carry it out, either by the Member States directly, or by such regional, subregional or international financial institutions as ADB and BDEAC and with the assistance of UNDP and UNIDO. In carrying out the studies, account should be taken of the cost, technology, marketing and other implications. However, most of those problems could be minimized through subregional co-operation and a closely integrated approach to the development of the subsector.

65. The above studies should lead to the preparation of a subsectoral master plan in each subsector as well as to the identification of economically viable projects. They would also provide the necessary data and information, confirm the viability of such a subprogramme, specify the investment cost and locations, and constitute a basis for the master plan.

#### SUPPORT PROJECTS

##### UDEAC

- (S1) Assistance to the Central African Customs and Economic Union (UDEAC)
- (S2) Assistance to the Central African Republic in the development of an integrated meat-processing plant, Central African Republic and UDEAC

##### CEPGL

- (S3) Assistance to the Economic Community of the Great Lakes Countries (CEPGL)
- (S4) Development of peat resources, CEPGL
- (S5) Assistance to the CEPGL in the manufacture of electrical equipment, CEPGL

##### UAR

- (S6) Feasibility study on the manufacture of railway equipment in Central African subregion, UAR

ECCAS

(S7) Assistance to the Economic Community of Central African States (ECCAS)

ISTA

(S8) Assistance to the Subregional Higher Institute for Appropriate Technology (ISTA)

AIPO

(S9) Assistance to the African Intellectual Property Organization (AIPO)

CHAPTER V

STRATEGY FOR ACCELERATING THE IMPLEMENTATION OF THE  
REVISED PROGRAMME

Measures to be adopted

66. In the plan for the implementation of the Initial Integrated Industrial Promotion Programme for Central Africa, the measures outlines 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, OAU and ECA, which have a catalytic role to play in subregional industrial co-operation, must take steps to ensure that the measures adopted at the national and subregional levels are more effective, in order to secure fuller implementation of the revised programme.



At the national level

67. 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. These actions include:

- (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 introduction of 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 ABD, ECA, 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.

68. The endorsement of programmes and projects by the legislative authorities of subregional organizations is a protracted and quite complicated process. Furthermore, Government representatives attending the meeting of these subregional organizations are invariably changing and often come from different ministries, with the representative of one ministry being unaware of the projects submitted by another ministry. Thus, particular attention should be paid to maintaining continuity at the national level in respect of projects submitted to subregional and international organizations.

69. In the light of the above and in order to maintain continuity in respect of projects submitted to subregional and international organizations, the following suggestions may be found useful:

- Any projects prepared by a national Government should be jointly endorsed by both the Ministries of Planning and Industry, submitted in order of priority and accompanied by the necessary feasibility studies as well as a status report on implementation. This would also help to enhance co-ordination and the exchange of information at the national level;
- Efforts should be made to maintain consistency in the representation of Governments at various meetings dealing with industrial co-operation.

70. The Governments of the subregion also need to lend greater impetus to the involvement of the private sector in the formulation and implementation of the projects retained in the subregional programme. A programme for the greater involvement of the private sector, including national competences, especially 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. It is a well-known fact that industrial co-operation projects often fail on account of faulty studies, inadequate institutional capacity and lack of support in terms of project preparation, evaluation, promotion and management.

71. 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 crisis in public sector enterprises in most countries of the subregion and a programme for their rehabilitation.

72. It is strongly recommended that existing National Co-ordinating Committees for the IDDA or UNIDO as well as the Operational Focal Points for the IDDA should be strengthened or established as appropriate. Active working contacts should be maintained between these committees and operational focal points and the secretariats of the relevant subregional organizations in order to ensure the successful implementation of the subregional programme.

At the subregional level

73. The industrial priorities established by ECCAS, UDEAC and CEPGL coincide with the priority activities identified for the implementation of the Initial Integrated Industrial Promotion Programme at the subregional level. These activities include:

- (a) Formal endorsement and implementation of the Initial 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 sector-by-sector 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.
- (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 re-activation 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.

74. 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 be insignificant. 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 a convergence in the compensation mechanisms applied by the clearing houses in the subregion, a matter that should be considered by the subregional organizations concerned. Furthermore, the capacity and capabilities of the relevant subregional organizations,

especially ECCAS, UDEAC and CEPGL will have to be reinforced in order to ensure effective follow-up and monitoring of the implementation of the programme.

75. Institutional measures to effect changes and implement policies and programmes should therefore include the reorganization and strengthening of the secretariats of the relevant intergovernmental organizations, especially ECCAS, UDEAC and CEPGL. Consideration might also be given to the establishment of a department for project preparation, evaluation and promotion in each of those organizations, whose functions could include 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 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.

76. The department will need to be properly staffed with competent personnel so as to enable it 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 subsectors and support areas. The department should maintain a dynamic work relationship with the relevant intergovernmental organizations, with national, subregional and regional organizations, as well as with UNIDO and the ECA Multinational Programming and Operational Centre (MULPOC). It should also keep itself fully informed of all major technical assistance proposals and programmes relating to industrial projects in the subregion.

77. It is also urged that action be taken, as recommended in the programme for the IDDA<sup>3/</sup> and in the guidelines for priority actions during the preparatory phase of the Decade<sup>4/</sup>, to establish a subregional committee on the IDDA, which could reinforce the existing subregional industrial co-ordination machines in monitoring the implementation of the programme. Proper co-ordination also needs to be maintained between the various subregional co-ordination mechanisms in order to avoid duplication and to ensure the early endorsement of any decisions by the competent legislative authorities.

#### Promotion of the programme

78. 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 ECCAS, UDEAC and CEPGL, should collaborate with the project sponsors in carrying out this co-ordination.

#### Mobilization of financial resources

##### Bilateral sources

79. Several developed countries provide some form of technical assistance to most of the countries in the subregion. The total value of the programmes is substantial. A more strategic approach towards harnessing this source of

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<sup>3/</sup> ID/287, Chapter III.

<sup>4/</sup> ID/310, page 11.

assistance could have a tremendous impact on development efforts. For example, some of the donor countries are often happy to participate in specific projects when approached individually. In this case, a two-pronged approach needs to be adopted. The host Government must take the leading role in making the necessary approach at the national level, while the secretariat of ECCAS, UDEAC and CEPGL or other relevant subregional organizations should support such requests by presenting the programme in a global context and promoting it among potential donors and investors in both developed and other developing countries.

#### Multilateral sources

80. Major sources of financing are the multilateral agencies such as the Arab Fund for Economic and Social Development (AFESD), Arab Bank for Economic Development in Africa (BADEA), European Economic Community (EEC), International Finance Corporation (IFC), OPEC Fund, and the World Bank. All these agencies should be approached with concrete project proposals based on a careful study of their priorities and areas of interest.

81. Consideration might be given to the publication of a brochure by the ECCAS, UDEAC and CEPGL secretariats, with the assistance of UNIDO, on the Revised Integrated Industrial Promotion Programme for Central Africa. It should be specifically aimed at attracting support from bilateral and multilateral sources. It is suggested that the communities seek representation and recognition in aid-giving conferences such as the Lomé Convention of the EEC/ACP countries and the Paris Round-table Conferences with investors.

82. 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 should also provide assistance through its investment promotion programme, including the use of its Investment Promotion Services. Although it disposes of only limited resources itself, UNIDO should 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 fairs and related promotional activities, UNIDO should evolve innovative ways and means of involving major financial institutions and assisting countries in the subregion to secure their co-operation.

83. It should also be recalled that the number of least developed and land-locked countries in the Central African subregion is proportionately higher than in any other subregion in Africa. Consequently, UNIDO and other organizations should take adequate measures so as to give priority to the countries in the subregion when allocating resources, including those available within the framework of the IDDA. UNIDO should intensify its efforts to secure additional funds for projects in the subregion and serious consideration should be given to convening a meeting of potential donors, investors and financing institutions in the subregion.

Role of the co-ordinating and other agencies

84. As stated in the initial programme, the successful implementation and economic operation 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 OAU, ADB and other specialized African organizations such as ARCT, ARCEDEM, AIHTTR, PATU, Central African Mineral Resources Development Centre and IDEP, 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 would provide technical assistance, upon request, in the following areas:

- (a) Updating of the subregional industrial programme;
- (b) Preparation 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) Identification of 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) Establishment of a subregional co-ordinating committee 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 69(b);



- (e) Development of 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) Organization of 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.

In delivering the technical assistance described above, the organizations should make every effort to utilize local expertise and capabilities available in the subregion.

86. It is perhaps important to stress the need for a system which should be developed by UNIDO, in co-operation with the ECA, ECCAS, CEPGL, OAU and UDEAC and 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 is urged to 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

Industrial integrated promotion programme  
considered at Bangui, February 1984

STATUS OF PROJECT IMPLEMENTATION

<u>Core project<sup>a/</sup></u>	<u>No.</u>	<u>Sponsor</u>	<u>Priority</u>	<u>Progress achieved</u>
Rehabilitation of sugar industry	1	Angola	Short/medium term	No information available.
Upgrading of a sugar factory	2	Congo	Short/medium term	The project basically entails the rehabilitation of a sugar plant that will also serve such export markets as the EEC. Major investments have already been made and, in the final analysis, the project, which is at an advanced stage, will comprise a sugar factory with a production capacity of 70,000 t/year and a sugar refinery.
Establishment of a distillery	3	Burundi	Long term	The project which has advanced rapidly is closely linked with the sugar plant in Mosuo that is scheduled to enter into operation in about two years time. A feasibility study has been completed and the findings are available, thus indicating the possibility of realization in the short term.
Integrated cattle product and processing complex	4	CEPGL	Short term	Following a global assessment made of the products related to animal husbandry, it has been decided initially to focus efforts on the dairy products aspects of the project. Pre-feasibility studies of the Community dairy products industry are already available and feasibility studies are being conducted. Studies relating to the other aspects will be carried out at a later stage.
Integrated development of the fish-processing industry	5	CEPGL	Long term	Pre-feasibility studies have been completed and the next stage will be to conduct a full-scale feasibility study, provided funds are available.
Agro-industrial complex processing cassava	6	Central African Republic	Short/medium term	No information available.
Wood-processing complex	7	CEPGL	Short/medium term	Forest resources assessed and Zaire selected as host country. The already existing market survey is currently being updated and the acquisition of land is under negotiation with the host country.
Aluminium industry	8	Cameroon	Long term	Two mixed-economy companies established for prospecting and carrying out relevant studies.
Expansion of a tin plant	9	Rwanda	Short/medium term	Present foundry operating at 50 per cent capacity owing to lack of cassiterite. The Government of Rwanda is currently restructuring the mining sector in general. Preliminary studies are being conducted, the results of which will bear implications for the tin plant.

a/ Number and title as cited in ID/WG.414/3/Rev.1.

Core project <sup>a/</sup>	No.	Sponsor	Priority	Progress achieved
Rehabilitation of the Maluku steel plant	10	Zaire	Short/medium term	Several studies have been carried out, including studies by ECA and UNIDO.
Manufacture of agricultural equipment and machinery	11	Rwanda	Short term	The project is part of a CEPGL subregional project that has entered the production phase. It currently produces 1 million hoes a year and the production of small pieces of equipment such as wheelbarrows and ploughs is being studied. In this connection, contacts are being established with various bodies, primarily the Centre for Industrial Development (CDI), so that more detailed studies can be carried out with respect to the expansion of current operations.
Manufacture of watches and watch components	12	Central African Republic	Short/medium term	No information available.
Establishment of a petrochemical complex	13	Gabon	Long term	The project, which dates from the previous decade, was designed to ensure the local processing of petroleum and has been retained in the current five-year development plan. However, given the fact that agriculture and large-scale infrastructure projects, viz. the Trans-Gabon railway, take precedence, implementation of the project is only envisaged in the long term once the Trans-Gabon railway has been completed.
Expansion of a petroleum refinery	14	Congo	Short/medium term	No information available.
Production of ammonia fertilizers	15	CEPGL	Short/medium term	The project which is closely interlinked with projects 19 and 20 also forms parts of projects 23 and 24. These interrelated projects are a composite part of the Lake Kivu methane gas project. Following the invitation and evaluation of tenders, contracts have been awarded for the requisite feasibility studies which are currently being conducted.
Laboratory for pharmaceutical products	16	Central African Republic	Short term	No information available.
Upgrading potash deposits in the Congo	17	Congo	Short/medium term	The relevant studies have been completed.
Production of calcium carbide	18	Rwanda	Short/medium term	Local deposits have been studied and new trials conducted. The results which are not yet officially available seem to indicate the practicability of continuing the programme and, in turn, of implementing the project which is aimed at producing 3,000 tons of calcium carbide per annum for industrial purposes (drilling and cutting of metal, the economic utilization of acetylene as a fuel as well as the production of calcium cyanamide for agricultural applications).
Establishment of a methanol production plant in Zaire	19	Zaire	Short/medium term	See project 15.

<sup>a/</sup> Number and title as cited in ID/WG.414/3/Rev.1.

<u>Core project<sup>a/</sup></u>	<u>No.</u>	<u>Sponsor</u>	<u>Priority</u>	<u>Progress achieved</u>
Pilot project for the production of alcohol	20	Rwanda	Long term	See project 15.
Expansion and diversification of the production of the SOVERCO glassworks	21	Congo	Short/medium term	The plant, which has been rehabilitated, went into operation in July 1985. New equipment, however, is required and a relevant study has been conducted with the assistance of UNIDO within the framework of the IDDA.
Expansion of the Lutete cement plant	22	Congo	Short/medium term	Expansion carried out, present capacity 250,000 tons. Research underway into markets within UDEAC.
Expansion of the Mashyusa cement plant	23	Rwanda	Long term	The project, which has been designed with a view to integrating an existing plant with new projects such as a cement bagging plant, is envisaged to utilize locally available energy such as peat, thus replacing imported fuels which impinge heavily upon the production price of cement from the existing plant. The peat trials have proven inconclusive and attention is being turned to the utilization of methane gas, for which feasibility studies are being undertaken.
Reactivation of the Katana cement plant	24	Zaire	Short/medium term	The rehabilitation of the plant has been completed and it will go into operation in 1986. It is envisaged, at a later juncture, to use methane gas from Lake Kivu.
<u>Support projects</u>				
Assistance to UDEAC	S1	UDEAC	Short/medium term	Preparatory assistance provided by UNIDO within the framework of the IDDA. Other assistance also provided by UNDP/UNCTAD. This assistance was noted with appreciation by the UDEAC Council of Ministers which called for its continuation.
Assistance to CEPGL	S2	CEPGL	Short/medium term	Preparatory assistance provided by UNIDO within the framework of the IDDA.
Assistance to AIPO	S3	AIPO	Short/medium term	No information available.
Assistance to the Burundi pharmaceutical laboratory	S4	CEPGL	Short/medium term	Feasibility study carried out by Burundi in 1984 and a survey of the markets outside the CEPGL countries will soon be completed.

<sup>a/</sup> Number and title as cited in ID/WG.414/3/Rev.1.

Support project <sup>a/</sup>	No.	Sponsor	Priority	Progress achieved
Assistance to UDEAC/CEPGL in the development of an industrial training programme	S5	UDEAC/CEPGL	Short/medium term	Assistance provided by UNIDO in the organization of a training programme for CEPGL countries on project preparation and evaluation. A meeting organized in co-operation with UNIDO on the financing of small- and medium-scale enterprises had been held in Libreville (Gabon) in September 1985 and proven most successful. Another seminar was planned on the evaluation and management of small- and medium-scale industries.
Development of industrial consultancy and management capabilities	S6	UDEAC/CEPGL		
Development of local entrepreneurship (Directory of small-scale industrial project profiles)	S7	UDEAC/CEPGL	Short/medium term	First edition of the directory has been produced by the ECA and is being circulated. In addition, UNIDO has produced and circulated a folder entitled "How to start manufacturing industries" containing profiles of small-scale industries. Following the seminar in Libreville, an assessment is to be made of small-scale industries in the subregion. It has consequently proven necessary to draw up a directory of small-scale industries in the UDEAC countries.
Development of peat resources	S8	CEPGL	Short/medium term	Future assistance being provided to Burundi by UNIDO in this field has not advanced for want of funds.
CEPGL five-year industrial development plan	S9	CEPGL	Short/medium term	Initial assistance provided by UNIDO. Consultant to work on an industrial master plan for the CEPGL countries. The outcome of his findings is eagerly awaited as the master plan is a matter of urgency.
Assistance to the CEPGL countries in the manufacture of electrical equipment	S10	CEPGL	Short/medium term	The project, whose implementation has not advanced, calls for the preparation of market studies covering the CEPGL countries involved.
Feasibility study on the manufacture of railway equipment in the Central African subregion	S11	UAR	Short/medium term	A preliminary study, undertaken with the assistance of a UNIDO consultant and presented to the last UAR Congress, covered the entire African region. The UAR has also undertaken preparatory work but, for want of resources, this work has not advanced. A project was therefore presented to the ECA/UAR technical consultative meeting in Brazzaville in November 1985 with a view to attracting potential donors.
Development of the production of active ingredients for pesticides and insecticides	S12	CEPGL, Rwanda, Zaire	Short/medium term	A study has been conducted with the assistance of UNDP related to rehabilitating an existing production plant. Another study is being undertaken on the production of active ingredients for the production of pesticides and insecticides.
Assistance to the Central African Republic in the development of an integrated meat processing plant	S13	Central African Republic, UDEAC	Short/medium term	Preliminary studies and market surveys related to animal husbandry carried out by UDEAC with the assistance of UNIDO.

<sup>a/</sup> Number and title as cited in ID/WJ.414/3/Rev.1.

ANNEX III

Profiles of projects in the revised programme

The core projects are grouped by subsector and listed in order of priority within the respective subsectors. The support projects, all of which are accorded first priority, are grouped by promoter/sponsor.

PROJECT PROFILE NO. 1

PRIORITY: First (short-term)

SUBSECTOR: Engineering industry (agricultural machinery and equipment)

SUBREGION: Central Africa

1. Project Title: Manufacture of agricultural equipment and machinery, Rwanda

2. Objective: In a preliminary phase, to manufacture light tools and implements such as hoes, pickaxes, machetes and wheelbarrows, and, in a second phase, to manufacture more advanced agricultural machinery such as power tillers.

3. Promoter/ sponsor	5. Project status	7. Raw materials	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
4. Location	6. Immediate follow-up	8. Energy	11. Market	13. Total investment	
3. CEPGL	5. Pre-feasibility study completed; project operational in 1981 by CEPGL in co-operation with the EEC-ACP Industrial Development centre.	7. Iron and iron scrap available in the subregion in relatively limited quantities.	10. To be specified in the study.	12. See 10 above.	14. a) Consultations are being undertaken between the CEPGL secretariat and the Govern- ment of Rwanda as host country to work out the modalities for the feasibility study. b) See progress on implementation Annex II.
4. Rwanda	6. Feasibility study to be undertaken.	8. Electric power available.	11. Countries in the subregion.	13. See 10 above.	
		9. Existing physical infra- structure needs to be expanded.			



PROJECT PROFILE NO. 2

PRIORITY: First (short-term)

SUBSECTOR: Engineering industry (precision engineering)

SUBREGION: Central Africa

1. Project Title: Manufacture of watches and watch components,  
Central African Republic

2. Objective: To expand the capacity of the existing workshop to serve the needs of the subregion.

3. Promoter/ sponsor	5. Project status	7. Raw materials	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
4. Location	6. Immediate follow-up	8. Energy	11. Market	13. Total investment	
3. UDEAC	5. A workshop exists with a capacity of 32,000 watches per year.	7. Parts and components to be imported.	10. To be specified in the study.	12. 100,000 watches/year in the preliminary stage; further expansion to be determined in the market survey.	14. The Central African Republic was designated host and lead country for the project by the UDEAC Conference of Heads of State in 1975. No collaboration arrangements have been made to date.
4. Bangui, Central African Republic	6. Feasibility study including market survey scheduled for 1985.	8. Electric power available.	11. Countries in the subregion.	13. See 10 above.	
		9. Existing physical infra- structure needs to be developed.			

SUBSECTOR: Chemical industry

SUBREGION: Central Africa

1. Project title: Exploitation of methane gas from Lake Kivu

2. Objective: Make effective use of the methane gas from Lake Kivu and promoting import substitution by supplying the subregion with nitrogenous fertilizers, methanol and fuel (gas) for motorcars.

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

3. CIPGL 5. Feasibility studies  
 4. Gisenyi, Rwanda and Kalembe, Zaire 6. Feasibility studies and securing of funds for project implementation.  
 7. Gas deposits in Lake Kivu are estimated at 60,000 million cu.m.  
 8. Energy available.  
 9. Physical infrastructure to be developed.

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. To be specified in the feasibility study.  
 11. CIPGL and neighbouring countries.  
 12. 43 million cu.m. gas a year.  
 13. To be specified in the feasibility study.  
 14. The project comprises an industrial complex including a plant for harnessing, separating and purifying gas, a fertilizer plant, two compression and distribution plants for motorfuel (gas), a methanol production plant as well as a gas line feeding a cement plant.

PROJECT PROFILE NO. 4

PRIORITY: First (short-term)

SUBSECTOR: Chemical industry (fertilizers)

SUBREGION: Central Africa

1. Project Title: Production of phosphate fertilizers, Burundi

2. Objective: Manufacture of fertilizers using phosphate

3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
		9. Physical infrastructure
3. Burundi	5. Pre-feasibility study completed.	7. Phosphate deposits in Matongo. <sup>1/</sup>
4. Matongo, the proximity of the deposits	6. Complete market studies as confirmation of feasibility.	8. Energy from Rwezura dam, situated 20 kms from Matongo.
		9. Physical infrastructure to be developed.

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. CEPGL demand estimated at 29,000 tons a year.	12. 20,000 tons of super phosphate per annum based on the pre-feasibility study. This figure will be confirmed by the market survey indicated under 11 above.	14. a) Funds for setting up the plant being sought. b) Intermediates not available locally will be imported primarily from countries in the subregion.
11. Market survey shall be available by end of January 1986. It will also cover countries outside the CEPGL.	13. \$40 million according to the feasibility studies.	

1/ Reserves:

9,297,175 tons with a phosphate content of 7 per cent (weighted average of 13.3 per cent P<sub>2</sub>O<sub>5</sub>).  
13,716,350 tons with a phosphate content of 5 per cent (weighted average of 11.5 per cent P<sub>2</sub>O<sub>5</sub>).  
These reserves are minimal.

PROJECT PROFILE NO. 5

PRIORITY: First (short-term)

SUBSECTOR: Chemical industry (pharmaceuticals)

SUBREGION: Central Africa

1. Project Title: Establishment of a laboratory for pharmaceutical products,  
the Central African Republic

2. Objective: To develop on a pilot project basis, the production of such drugs as antimalarials, antibiotics, sulfonamides and vitamins, as a first step towards the establishment of pharmaceutical formulation units.

3. Promoter/ sponsor	5. Project status	7. Raw materials	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
4. Location	6. Immediate follow-up	8. Energy	11. Market	13. Total investment	
3. UDEAC	5. Preliminary study completed by the UDEAC secretariat.	7. Abundant medicinal plants available locally.	10. To be specified in the study.	12. Initial planned capacity: a) 500,000 capsules/day b) 100,000 ampoules and bottles/day c) 3,000 bottles of liquid medicines/day.	14. The project was approved by the UDEAC Conference of Heads of State and assigned to the Central African Republic. The Government of the Central African Republic has received an offer from COGECO Engineers for the implementa- tion of the project in two phases: (i) establishment of the basic manufacturing modules; (ii) addition of new modules.
4. Central African Republic	6. Pre-feasibility study being undertaken by a European pharma- ceutical centre and a German study group.	8. Energy is expected to be available on time.	11. Countries within the subregion and without.	13. See 10 above.	
		9. Existing physical infra- structure needs to be developed.			

PROJECT PROFILE NO. 6

PRIORITY: First (short-term)

SUBSECTOR: Chemical industry (pharmaceuticals)

SUBREGION: Central Africa

1. Project Title: Establishment of a pharmaceutical plant, Burundi

2. Objective: To produce drugs in solid, liquid, semi-solid form and for injection purposes

3. Promoter/ sponsor	5. Project status	7. Raw materials	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
4. Location	6. Immediate follow-up	8. Energy	11. Market	13. Total investment	
3. CEPGL	5. Feasibility study conducted by WHO in March 1984 is available.	7. All raw materials will basically have to be imported.	10. See attached list.	12. 24 million tablets 145,000 capsules 1,600 kg powder 49,500 l. liquids 5,000 suppositories 10,000 sachets digestion powder These figures relate to installed capacity and will be increased to meet envisaged demand.	14. The project was approved by the CEPGL Heads of State in 1982.
4. Burundi	6. Complementary market survey covering countries outside CEPGL is being undertaken.	8. Energy already available.	11. CEPGL countries and others.	13. \$6 million.	

1.     Antibacterials:  
28 million capsules  
3.25 million phials  
20.6 million tablets
  
2.     Anti-helminthics:  
37 million tablets  
0.5 million phials
  
3.     Anti-paludals:  
48 million tablets  
0.52 million phials
  
4.     Analgesics - antipyretics:  
51.4 million tablets
  
5.     Psychotropics:  
10.4 million tablets  
0.5 million suppositories
  
6.     Drugs for the respiratory system:  
1.9 million phials
  
7.     Drugs for digestive system:  
4.5 million tablets
  
8.     Vitamins and mineral salts:  
13 million pills  
5 million phials
  
9.     Dermatological drugs:  
1 million phials  
0.383 million tubes
  
10.    Hormonal drugs (oral contraceptives):  
86 million tablets
  
11.    Anti-hypertension:  
0.5 million tablets

PROJECT PROFILE NO. 7

PRIORITY: Second (medium-term)

SUBSECTOR: Chemical industry (other chemicals)

SUBREGION: Central Africa

1. Project Title: Upgrading potash deposits for the manufacture of chemicals, Congo

2. Objective: To develop the exploitation of potassium for the manufacture of diverse potassium-based chemicals.

3. Promoter/ sponsor	5. Project status	7. Raw materials	10. Project demand by product	12. Capacity by product	14. Additional information including collaboration arrangements already made and type of participation sought by member states
4. Location	6. Immediate follow-up	8. Energy	11. Market	13. Total investment	
3. UDEAC	5. Plant was operational until 1976.	7. Potassium reserves in the Congo estimated at 50 million tons.	10. To be specified in the study.	12. See 10 above.	14. a) Project approved by the UDEAC Conference of Heads of State in 1975. b) UDEAC secretariat was requested to seek the collaboration of interna- tional organizations in the conduct of the studies. c) The project has been sub- mitted to the Development Bank of Central African States and contacts have been initiated with potential technical partners. d) See progress achieved Annex II.
4. Molles, Congo	6. Feasibility study, whose financing is provided for in the fourth Congolese five-year plan (1986-1990).	8. Energy is available.	11. Countries in the subregion.	13. See 10 above.	
	9. Existing infrastructure needs to be expanded and improved.				

PROJECT PROFILE NO. 8

PRIORITY: Second (medium-term)

SUBSECTOR: Chemical industry (other chemicals)

SUBREGION: Central Africa

1. Project Title: Production of calcium carbide, Rwanda

2. Objective: To use the abundant local raw materials, mainly limestone and peat, to produce calcium carbide.

3. Promote./ sponsor	5. Project status	7. Raw materials	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
4. Location	6. Immediate follow-up	8. Energy	11. Market	13. Total investment	
3. Government of Rwanda	5. Pre-feasibility study completed: laboratory tests have been carried out in France for the coking of peat. The results are expected shortly.	7. In Rwanda, limestone deposits (9 million tons) and peat beds (62 million cubic metres).	10. To be specified in the study.	12. a) 10,000 tons of lime b) 10,000 tons of calcium carbide c) 15,000 tons of coked peat.	14. Given the scale of investment necessary, arrangements will have to be made in respect of access to markets, technological know-how and financial participation.
4. Rwanda	6. Feasibility study to be undertaken, should results prove positive.	8. To be developed.	11. Countries in the subregion.	13. \$31.25 million.	
		9. See 8 above.			



PROJECT PROFILE NO. 9

PRIORITY: First (short-term)

SUBSECTOR: Chemical industry (pesticides)

SUBREGION: Central Africa

1. Project Title: Production of active ingredients for pesticides, Rwanda

2. Objective: To produce active ingredients for the manufacture of pesticides

3. Promoter/ sponsor	5. Project status	7. Raw materials	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
4. Location	6. Immediate follow-up	8. Energy	11. Market	13. Total investment	
3. Rwanda	5. The rehabilitation of the 'pale' product process has just been completed.	7. Pyrethrum and kaolin.	10. To be specified in the study.	12. To be specified in the study.	14. Financing available for the studies. Consultant to carry out studies being sought.
4. Rubengeri, Rwanda	6. Studies on the production of active ingredients for pesticides financed by UNDP. Funding agencies have already been contacted to participate in the privatization and implementation of new investments.	8. Hydro-electricity and water available.	11. To be specified in the study.	13. To be specified in the study.	Favourable response from funding agencies already contacted.
		9. Buildings, roads, farms and raw materials in place.			

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PROJECT PROFILE N O. 10

PRIORITY: Third (long-term)

SUBSECTOR: Chemical industry (petrochemicals)

SUBREGION: Central Africa

1. Project Title: Establishment of a petrochemical complex for the manufacture of plastic products, Gabon

2. Objective: To develop the exploitation of hydrocarbons in Gabon with the objective of promoting the integrated development of the petrochemical industry and ensuring complementarity between that and other industries in the subregion.

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

3. UDEAC	5. Preliminary study completed in 1980 which outlined the programme of work involved.	7. Hydrocarbons available in Gabon.
4. Gabon	6. Feasibility study on the viability of a complex producing thermo-setting resins and synthetic fibres and to recommend appropriate technology.	8. Energy available.
		9. Physical infrastructure needs to be developed.

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. To be specified in the study.	12. See 10 above.	14. a) Project was approved by the UDEAC Conference of Heads of State in 1975.
11. Countries in the subregion.	13. See 10 above.	b) Participation in the multinational company studying the project sought of countries in the subregion.
		c) Collaboration with countries outside Africa sought in respect of technology.
		d) See progress achieved Annex II.

PROJECT PROFILE NO. 11

PRIORITY: Third (long-term)

SUBSECTOR: Chemical industry (petrochemicals)

SUBREGION: Central Africa

1. Project Title: Expansion of a petroleum refinery, Congo

2. Objective: To convert the existing refinery into a multinational enterprise so as to increase capacity utilization and serve the needs of the subregion.

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3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
3. Government of the Congo	5. Refinery in operation since 1983.	7. Petroleum available locally.
4. Pointe Noire, Congo	6. Study on increasing capacity utilization.	8. Energy available.
		9. Physical infrastructure needs to be developed and improved.

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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. To be specified in the study.	12. Throughput of 1 million tons petroleum/year.	14. Further detailed information to be provided by the Govern- ment of the Congo.
11. Countries in the subregion.	13. See 10 above.	

**PROJECT PROFILE** N O. 12

**PRIORITY:** First (short-term)

**SUBSECTOR:** Agro- and agro-based industries (food-processing)

**SUBREGION:** Central Africa

**Project Title:** Rehabilitation and extension of the sugar industry, Angola

**Objective:** To rehabilitate and expand existing sugar factories as well as diversify their production.

3. Promoter/sponsor	5. Project status	7. Raw materials	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
<p>Government of Angola</p> <p>Caxito, Bom Jesus and Luanda, Angola</p>	<p>a) Three factories are located at Caxito, Bom Jesus and Luanda.</p> <p>b) Pre-feasibility studies on the expansion of the sugar factory at Caxito and the yeast production plant at Luanda have been completed.</p> <p>c) A feasibility study on the conversion of the sugar plant at Bom Jesus into a rum distillery has been completed.</p>	<p>7. High-yield sugar cane plantations ensure regular supply.</p> <p>8. Energy available as plants already in operation.</p> <p>9. Present physical infrastructure needs to be developed further.</p>	<p>10. To be specified in the studies.</p> <p>11. Countries in the subregion.</p>	<p>12. a) Sugar: 43,700 tons/year</p> <p>b) Rum: 6.3 million litres/year (962)</p> <p>8.9 million litres/year (430)</p> <p>c) Yeast: 2,500 tons/year.</p> <p>13. Total investment: \$141.1 million, of which \$105.8 million for sugar production, \$34.1 million for that of rum and \$1.2 million for that of yeast.</p>	<p>14. Angola seeks: (i) participation in the form of foreign loans of the order \$84.7 million; and (ii) collaboration arrangements relating to the supply of know-how, equipment and machinery, access to foreign markets, as well as managerial and technical training for local staff.</p>

6. a) Feasibility studies in respect of 5b) above  
 b) Technical and financial promotion in respect of 5c) above.

PROJECT PROFILE N.O. 13

PRIORITY: First (short-term)

SECTOR: Agro- and agro-based industries (food-processing)

SUBREGION: Central Africa

1. Project Title: Upgrading of a sugar factory, Congo

2. Objective: To upgrade a sugar factory into a multinational enterprise and expand its capacity so as to serve the needs of the subregion.

3. <u>Promoter/sponsor</u>	5. <u>Project status</u>	7. <u>Raw materials</u>
4. <u>Location</u>	6. <u>Immediate follow-up</u>	8. <u>Energy</u>
1. <u>Government of the Congo</u>	5. The factory has been in operation since 1956. At present, it is being rehabilitated.	9. <u>Physical infrastructure</u>
2. <u>Congo</u>	6. Preliminary study on the upgrading of the factory.	7. Sugar cane plantations ensure ample supply.
		8. Hydro-electric power available.
		9. Physical infrastructure exists, but needs to be developed further.

10. <u>Projected demand by product</u>	12. <u>Capacity by product</u>	14. <u>Additional information including collaboration arrangements already made and type of participation sought by member states</u>
11. <u>Market</u>	13. <u>Total investment</u>	
10. To be established in the study.	12. A total capacity of 140,000 tons of sugar/year.	14. a) The project was put forward by the Congolese Government. Details as to collaboration arrangements and mode of participation have yet to be elaborated. b) See progress achieved in Annex II.
11. Countries in the subregion.	13. See 10 above.	

PROJECT PROFILE NO. 14

PRIORITY: First (short-term)

SUBSECTOR: Agro- and agro-based industries (food-processing)

SUBREGION: Central Africa

1. Project Title: Establishment of a distillery, Burundi

2. Objective: To derive alcohol from molasses produced by the Moseo sugar factory

3. Promoter/ sponsor	5. Project status	7. Raw materials	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
4. Location	6. Immediate follow-up	8. Energy	11. Market	13. Total investment	
3. Burundi	5. Feasibility study available.	7. Sugar factory will produce 6,800 tons of molasses a year.	10. a) Alcohol for admixture to motorfuel: 1,927 cu.m. once fully operational (1990). b) Alcohol for pharma- ceutical and industrial purposes: starting at 53 cu.m. in the first year of production.	12. 1,980,000 l. of alcohol a year. 13. FBu431,153,840.	14. a) The Moseo sugar factory could enter into pro- duction in 1987 with an annual output of 15,000 tons. b) In the absence of a joint partner, funds will be sought for technical assistance and training purposes. c) Funds for the projects are being sought.
4. Moseo, near the sugar plant	6. Securement of funds and implementation of the project.	8. Hydro-electric energy available. 9. Physical infrastructure to be developed.	11. Subregional market.		

PROJECT PROFILE NO. 15

PRIORITY: First (short-term)

SUBSECTOR: Agro- and agro-related industries (food-processing)

SUBREGION: Central Africa

1. Project Title: Community dairy-products project

2. Objective: To meet the basic needs of the population of the subregion, to reduce the importation of dairy products and to process the milk produced in the Masisi area.

3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
		9. Physical infrastructure
3. CEPGL	5. Pre-feasibility studies available and feasibility studies being conducted.	7. Adequate milk supplies available in the Masisi area (117,000 litres a day).
4. Coma. Zaire	6. Feasibility studies and securing of funds.	8. Energy available.
		9. Physical infrastructure to be developed, particularly the roads for collection purposes, the financing of which is being negotiated with Zaire.

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. To be specified in the feasibility study; in any event far more than 75,000 litres of milk a day.	12. Process some 30,000 litres of milk a day in order to produce pasteurized milk, butter, yoghurt and cheese.	14. a) Project was adopted by the Conference of CEPGL Heads of State in December 1985. b) CEPGL working jointly with CDI on the feasibility studies and the identification of a foreign partner.
11. CEPGL countries.	13. See 10 above.	

PROJECT PROFILE NO. 16

PRIORITY: Second (medium-term)

SUBSECTOR: Agro- and agro-related industries (food-processing)

SUBREGION: Central Africa

1. Project Title: Establishment of an agro-industrial complex processing,  
the Central African Republic

2. Objective: To develop the production of cassava flour and  
by-products (starch, glucose, adhesives).

3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
		9. Physical infrastructure
3. Government of the Central African Republic	5. Feasibility study undertaken by SICAGRI in conjunction with CARD MOUZON DEL- POSSE (France).	7. Raw materials available.
4. Boali, Central African Republic	6. Establishment of a company.	8. Energy available.
		9. Infrastructure available (location near the trans- African highway).

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. In the Central African Republic alone demand for 8,000 tons of cassava flour per year.	12. 1,200 tons cassava flour per annum.	14. Financing and technical partners being sought.
11. Community market.	13. 620 million 1979.	



PROJECT PROFILE NO. 17

PRIORITY: Second (medium-term)

SUBSECTOR: Agro- and agro-related industries (food-processing)

SUBREGION: Central Africa

1. Project Title: Integrated development of the fish-processing industry,  
CEPGL

2. Objective: To develop the exploitation of halieutic resources  
and establish fish canning/preservation facilities.

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3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
3. CEPGL	5. Pre-feasibility study completed by an ECA consultant.	9. Physical infrastructure
4. To be determined	6. Further in-depth study to be undertaken.	7. Numerous lakes and rivers in the subregion contain enormous fish resources. For the CEPGL countries alone, these are estimated at 416,500 tons a year, only 30 per cent of which were exploited in 1975/1976.
		8. Energy available.
		9. Physical infrastructure needs to be developed further.

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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. To be specified in the study.	12. See 10 above.	14. a) The project was approved by the CEPGL Conference of Heads of State in 1979.
11. Countries in the subregion.	13. See 10 above.	b) See progress achieved in Annex II.

PROJECT PROFILE NO. 18

PRIORITY: Second (medium-term)

SUBSECTOR: Agro- and agro-related industries (forest products)

SUBREGION: Central Africa

1. Project Title: Establishment of a wood-processing complex, CEPGL

2. Objective: To exploit local forest resources for the manufacture of wood products such as sawn wood, plywood and panels.

3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
		9. Physical infrastructure
3. CEPGL	5. Preliminary study completed in 1981/1982 by the ECA/FAO/UNIDO Forest Industries Advisory Group.	7. Several hundred million hectares of forest resources available, of which 107 million are in the CEPGL countries.
4. To be determined	6. a) An exhaustive forest inventory to identify species of multinational interest. b) Feasibility study on wood processing complex.	8. Energy resources to be developed.
		9. Physical infrastructure needs to be developed.

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. To be specified in the feasibility study.	12. See 10 above.	14. a) Project approved by the CEPGL Conference of Heads of State. b) Preliminary study referred to under item 5) covers the CEPGL countries since similar studies have been or are about to be completed for other parts of the subregion, a synthesis of the findings can be attempted. c) See progress achieved in Annex II.
11. Burundi, Rwanda, Eastern Zaire and other parts of the subregion.	13. a) Total investment estimated at \$13.6 million in 1981 b) Feasibility study cost estimated at \$50,000 in 1981.	

PROJECT PROFILE NO. 19

PRIORITY: First (short-term)

SUBSECTOR: Building materials (cement)

SUBREGION: Central Africa

1. Project Title: Expansion of the Loutete cement plant, Congo

2. Objective: To expand the existing cement factory so as to serve the needs of the subregion.

3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
		9. Physical infrastructure
3. Government of the Congo	5. Project operational.	7. a) Limestone available. b) Gypsum to be imported.
4. Loutete, Congo	6. Study on the extension of the plant.	8. Energy available.
		9. Physical infrastructure needs to be developed.

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. To be specified in the study.	12. 250,000 tons of cement/year.	14. a) Project is being proposed by the Government of the Congo which wishes to convert the existing plant into a multinational enterprise. b) See progress achieved in Annex II.
11. Countries in the subregion.	13. 18.5 million FCFA.	

PROJECT PROFILE NO. 20

PRIORITY: First (short-term)

SUBSECTOR: Building materials (cement)

SUBREGION: Central Africa

1. Project Title: Reactivation of the Katana cement plant, Zaire

2. Objective: To rehabilitate and extend the Katana cement plant so as to increase production and serve the needs of the subregion.

3. Promoter/ sponsor	5. Project status	7. Raw materials	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
4. Location	6. Immediate follow-up	8. Energy	11. Market	13. Total investment	
3. CEPGL	5. Plant exists, but operations at a standstill.	7. Major limestone deposits available; gypseum imported.	10. To be specified in the study.	12. In the initial phase: 60,000 tons/year.	14. a) Project approved by the CEPGL Conference of Heads of State in 1980. Zaire seeks shareholding and market arrangements of countries in the subregion. b) The project was approved by the CEPGL Heads of State.
4. Katana, Zaire	6. To complete the ongoing study on the rehabilitation and embark on a study on increasing plant capacity.	8. Plant has been using peat which is locally available in abundant quantities, but use of methane gas also envisaged at a later stage.	11. Burundi, Rwanda and Eastern Zaire.	13. Rehabilitation costs estimated at \$3 million.	
		9. Physical infrastructure needs to be developed.			

PROJECT PROFILE N.O. 21

PRIORITY: Third (long-term)

SUBSECTOR: Building materials (cement)

SUBREGION: Central Africa

1. Project Title: Expansion of the Mashyuza cement plant, Rwanda

2. Objective: Using local limestone to produce cement so as to serve better the needs of the subregion.

3. Promoter/ sponsor	5. Project status	7. Raw materials	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
4. Location	6. Immediate follow-up	8. Energy	11. Market	13. Total investment	
3. CEPGL	5. Project operational: production tests have already started.	7. Major limestone deposits available locally; gypsum to be imported.	10. To be specified in the study.	12. In the initial stage: 50,000 tons cement/year.	14. a) Project approved by the CEPGL Conference of Heads of State in 1980. Rwanda access to markets in other countries in the subregion. b) Production of cement bags is envisaged. c) See progress achieved in Annex II.
4. Mashyuza, Rwanda	6. Study on the extension of the existing factory.	8. Imported fuel oil but the utilization of peat is foreseen at a later stage.	11. Rwanda, Burundi, Eastern Zaire and other countries in the subregion.	13. \$15 million.	
		9. Infrastructure needs to be developed.			

SUBSECTOR: Building materials (non-metallic mineral products)

SUBREGION: Central Africa

1. Project Title: Expansion and diversification of production at a glass manufacturing plant, Congo

2. Objective: To convert the plant into a multinational enterprise, expanding it so as to serve the needs of countries in the subregion.

3. Promoter/ sponsor	5. Project status	7. Raw materials	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
4. Location	6. Immediate follow-up	8. Energy	11. Market	13. Total investment	
3. Government of the Congo	5. Project operational since 1978.	7. Sand, pits in the immediate vicinity of the plant; chemicals required to be imported.	10. To be specified in the study.	12. See 10 above.	14. a) The project has been put forward by the Government of the Congo for inclusion in the initial integrated programme. b) Project envisaged in the five-year national develop- ment plan (1986-1990).
4. Pointe Noire, Congo	6. Pre-feasibility study on the expansion of the plant.	8. Electric energy available.  9. Available.	11. Countries in the subregion.	13. See 10 above.	

PROJECT PROFILE NO. 23

PRIORITY: Third (long-term)

SUBSECTOR: Metallurgical industry (aluminium)

SUBREGION: Central Africa

1. Project Title: Integrated development of the aluminium industry,  
Cameroon

2. Objective: To exploit bauxite deposits at Mini-martap, Cameroon, for the manufacture of aluminium products which are currently imported.

3. Promoter/ sponsor	5. Project status	7. Raw materials	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
4. Location	6. Immediate follow-up	8. Energy	11. Market	13. Total investment	
3. UDEAC	5. Preliminary studies completed by the UDEAC secretariat.	7. Reserves of 1,000 million tons of bauxite, with an alumina content of 43-46 per cent in Cameroon.	10. To be specified in the study.	12. See 10 above.	14. a) The project was approved by the UDEAC Conference of Heads of State in 1975 and allocated to Cameroon. b) Financial participation sought of other countries in the subregion, while collaboration arrangements pertaining to technology, training and management will be entered into with countries outside Africa.
4. Mini-martap, Cameroon	6. Pre-feasibility study to be undertaken.	8. Major hydro-electric potential.	11. Countries in the subregion.	13. See 10 above.	
		9. Physical infrastructure needs to be developed.			

PROJECT PROFILE NO. 24

PRIORITY: Second (medium-term)

SUBSECTOR: Metallurgical industry (iron and steel)

SUBREGION: Central Africa

1. Project Title: Rehabilitation of the Maluku steel plant, Zaire

2. Objective: To reactivate the plant at Maluku, thus permitting the manufacture of bars, merchant products, flat and galvanized sheets to supply the countries in the subregion, further to which the plant would form a nucleus for the development of an integrated iron and steel industry.

3. Promoter/ sponsor	5. Project status	7. Raw materials	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
4. Location	6. Immediate follow-up	8. Energy	11. Market	13. Total investment	
3. Government of Zaire	5. Plant has been in operation since 1974.	7. Scrap iron is available in limited quantities and the subregion has enormous iron ore and other metal reserves.	10. To be specified in the study.	12. Installed capacity: 250,000 tons/year of which 100,000 tons for hot rolling mill; and 150,000 tons for cold rolling mill.	14. The plant is currently operating at very low capacity for want of iron scrap. Arrangements are being sought regarding the supply of steel products and the purchase of scrap iron.
4. Maluku, (Kinshasa) Zaire	6. Study on the reactivation of the plant and the implications of its conversion into a multinational enterprise.	8. Abundant supply of electric power (Inga dam).	11. Countries in the subregion.	13. See 10 above.	
		9. Physical infrastructure available.			



PROJECT PROFILE NO. 25

PRIORITY: Second (medium-term)

SUBSECTOR: Metallurgical industry (tin)

SUBREGION: Central Africa

1. Project Title: Expansion of a tin plant, Rwanda

2. Objective: To process locally tin ore that is currently exported in unprocessed form.

3. Promoter/ sponsor	5. Project status	7. Raw materials	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
4. Location	6. Immediate follow-up	8. Energy	11. Market	13. Total investment	
3. Rwanda	5. The plant is already in operation.	7. Cassiterite reserves estimated at: (i) 65,000 tons in Rwanda (ii) 200,000 tons in Zaire.	10. To be specified in the study.	12. 2,000 tons tin/year.	14. a) Financial participation as well as arrangements for the supply of tin ore sought within the subregion. b) Access sought to markets in countries outside Africa. c) See progress achieved in Annex II.
4. Kigali, Rwanda	6. Study on the expansion of the plant with a view to establishing a rolling mill and start the production of "objets d'art".	8. Energy available.	11. Export market outside Africa.	13. See 10 above.	

PROJECT PROFILE NO. S1

PRIORITY: First (short-term)

SUBREGION: Central Africa

1. Project Title: Assistance to the Customs and Economic Union of Central Africa (UDEAC)
2. Objective: To strengthen the capacity of UDEAC secretariat and member countries in the programming, creation, appraisal and promotion of community industries.

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

- 
3. UDEAC
4. UDEAC secretariat, Bangui, Central African Republic
5. \$1.4 million
6. a) Immediate objective: (i) To determine industrial specialization in each member country, particularly regarding integrated development schemes for energy, mineral resources and industry, including agro-industries; (ii) to carry out sectoral surveys in selected priority industrial subsectors and identify community projects within UDEAC, particularly in the priority core industrial subsectors; (iii) to prepare pre-feasibility studies; (iv) to assist UDEAC secretariat and the member countries in organizing bids and financing their industries; (v) to assist in the evaluation of engineering studies, supervision of plant construction and manpower development; (vi) to propose statutes for UDEAC industrial enterprises, identifying the operation of such enterprises, including raw material supplies, trading of finished goods and distribution of profits; (vii) to prepare a complete survey and evaluation of all training facilities/schemes in the subregic on the basis of which comprehensive training schemes can be prepared and implemented; (viii) to develop and strengthen industrial management and consultancy institutions and policies in the UDEAC countries; and (ix) to upgrade entrepreneurial capabilities in the UDEAC countries.
- b) Expected output: (i) Subsectoral plans for selected priority industrial subsectors; (ii) pre-feasibility and feasibility studies; (iii) detailed description of identified projects; (iv) assistance in project promotion; (v) assistance in the evaluation of engineering studies and the supervision of the establishment of community projects; (vi) a survey of all training facilities and introduction of appropriate schemes; (vii) development of managerial and consultancy capabilities; and (viii) directory of small-scale industries and related schemes.
- c) Proposed duration: 4 years.

P R O J E C T   P R O F I L E   N O.   S 2

P R I O R I T Y: First (short-term)

S U B R E G I O N: Central Africa

1. Project Title: Assistance to the Central African Republic in the development of an integrated meat processing plant, Central African Republic and UDEAC
2. Objective: To ensure the integrated development of the various stages of meat production and processing encompassing a slaughterhouse, tannery, meat packing plant and dairy.

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|----------------------------|---|
| 3. Promoter/<br>sponsor    | 6. Project description and additional information |
| 4. Location                |   |
| 5. Estimated<br>total cost |   |
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|---------------------------------------|--|
| 3. Central African Republic/<br>UDEAC | 6. a) Within the scope of this project which was initiated by the Central African Republic, it is planned to promote the integrated development of the meat processing and associated industries, i.e. slaughterhouse, tannery, meat packing plant and dairy.                |
| 4. Central African Republic           | b) In the first stage, the project will comprise an assessment of the requirements of the UDEAC countries, while in the second stage an integrated programme will be drawn up comprising the various projects to be implemented in the different countries in the subregion. |
| 5. To be determined                   |  |

PROJECT PROFILE NO. S3

PRIORITY: First (short-term)

SUBREGION: Central Africa

1. Project Title: Assistance to the Economic Community of the Great Lakes Countries (CEPGL)
2. Objective: To assist the CEPGL secretariat and member countries in strengthening their capabilities for planning, programming, establishment, appraisal and promotion of community industries.

- 
3. Promoter/  
sponsor
4. Location
5. Estimated  
total cost

6. Project description and additional information

- 
3. CEPGL
4. CEPGL secretariat, Gisenyi, Rwanda
5. \$1.31 million
6. a) Immediate objective: (i) to prepare a five-year development plan for the community, including industry, and contribute to the acceleration of industrial development and integration in the CEPGL; (ii) to carry out subsectoral surveys for selected priority industrial subsectors as well as market and pre-feasibility studies for various CEPGL industrial projects approved for implementation by CEPGL and related to the metallurgical, chemical, engineering and building materials industries; (iii) to assist in deploying the various community industries within CEPGL and in defining the responsibilities of the implementing countries and the role of the CEPGL secretariat; (iv) to assist the CEPGL secretariat and the member countries in organizing bids and financing for those community industries; (v) to assist in the evaluation of engineering studies, supervision of plant construction, and manpower development; (vi) to propose statutes for those community industries identifying the operation of such enterprises including raw material supplies, trading of finished goods and distribution of profits; (vii) to prepare a complete survey and evaluation of all training facilities/schemes in the subregion on the basis of which comprehensive training schemes can be prepared and implemented; (viii) to develop and strengthen industrial management and consultancy institutions and policies in the CEPGL countries; and (ix) to upgrade entrepreneurial capabilities in the CEPGL countries.
- b) Expected output: (i) Master plan for the community; (ii) subsectoral plans for selected priority industrial subsectors and studies of the subregional market for the industries selected; (iii) pre-feasibility studies of approved community industries approved; (iv) determination of ways and means of establishing the community industries approved; (v) a survey of all training facilities and introduction of appropriate schemes; (vi) development of managerial and consultancy capabilities; and (vii) directory of small-scale industries and related schemes.

PROJECT PROFILE NO. S4

PRIORITY: First (short-term)

SUBREGION: Central Africa

1. Project Title: Development of peat resources, CEPGL

2. Objective: To undertake a study identifying and assessing peat resources in the CEPGL countries, including the consideration of appropriate technology, and promoting the use of peat as fuel.

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3. Promoter/  
sponsor  
4. Location  
5. Estimated  
total cost

6. Project description and additional information

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3. CEPGL  
4. To be  
determined  
5. \$183,000

6. a) A preliminary study completed in 1981/82 provided a synthesis of the findings of previous studies carried out in the CEPGL countries. In that study it was recommended that a further in-depth study be undertaken including an exhaustive inventory and assessment of the quantitative and qualitative significance of peat resources, especially in Eastern Zaire, and in updating of the work carried out in Rwanda and Burundi.

b) The study should recommend methods for the rational exploitation of peat and tests for the mechanized production and compression of peat. It should also touch upon the techno-economic and financial aspects so as to make it possible to determine whether peat can be effectively exploited in the subregion.

PROJECT PROFILE NO. S5

PRIORITY: First (short-term)

SUBREGION: Central Africa

1. Project Title: Assistance to the CEPGL in the manufacture of electrical equipment, CEPGL
2. Objective: To determine the components of an electrical equipment manufacturing industry using products of the copper-wire drawing-mill in Zaire and the aluminium refining plant in Cameroon.

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3. Promoter/  
sponsor
4. Location
5. Estimated  
total cost

6. Project description and additional information

- 
3. CEPGL
4. Bangui,  
Gisenyi or  
Libreville
5. \$120,000
6. a) Immediate objectives: to carry out a study which will help to determine the kind, scale, location and calculations of electrical equipment manufacturing projects to be integrated with the existing copper-wire drawing-mill and aluminium refinery.
- b) Expected output: development plan for the electrical equipment industry at the subregional level.
- c) Project duration: 1 year.

P R O J E C T   P R O F I L E   N O.   S6

**PRIORITY: First (short-term)**

SUBREGION: Central Africa

1. **Project Title:** Feasibility study on the manufacture of railway equipment in the Central African subregion, UAR
2. **Objective:** To determine those types of railway equipment the region is best suited to produce with the objective of minimizing reliance on external markets and promoting the railway equipment industry.

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| <ol style="list-style-type: none"><li>3. <b>Promoter/<br/>sponsor</b></li><li>4. <b>Location</b></li><li>5. <b>Estimated<br/>total cost</b></li></ol> | <ol style="list-style-type: none"><li>6. <b>Project description and additional information</b></li></ol> |
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| <ol style="list-style-type: none"><li>3. Union of African Railways (UAR)</li><li>4. The study will cover the countries of the subregion</li><li>5. \$0.5 million</li></ol> | <ol style="list-style-type: none"><li>6. The project is part of a study covering the region of Africa is incorporated in the Transport and Communications Decade Programme for Africa. An initial study covering the West African subregion resulted in a project for the establishment of a unit manufacturing railway wagons to be located in Burkina Faso (with a subsidiary in Senegal) at an estimated cost of \$8 million. This project is related to a similar study of the Central African subregion. Its estimated duration is one year.<br/>UNIDO carried out a study on a strategy for the production of rails, sleepers and other steel materials for railways within the framework of developing the iron and steel industry in Africa.<br/>The Union of African Railways organized a congress on individual development and the manufacture of railway equipment in Africa. The project was presented by UAR to potential donors during the technical consultative meeting organized by ECA in Brazzaville (Congo) in November 1985.</li></ol> |
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P R O J E C T   P R O F I L E   N O.   S7

PRIORITY: First (short-term)

SUBREGION: Central Africa

1. Project Title: Assistance to the Economic Community of Central African States (ECCAS)
2. Objective:     a) To assist the ECCAS secretariat in preparing a work programme and the related budget for consideration by the ECCAS meeting of Ministers;  
                  b) To prepare a long-term technical assistance project.
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|----------------------------|---|
| 3. Promoter/<br>sponsor    | 6. Project description and additional information |
| 4. Location                |   |
| 5. Estimated<br>total cost |   |
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- |             |   |
|-------------|---|
| 3. ECCAS    | 6. a) Immediate objective: see 2 above.   |
| 4. ECCAS    | b) Expected output: (i) work programme for the sub-secretariat responsible for economic affairs for the next three years, and the corresponding budget; (ii) long-term technical assistance project document. |
| 5. \$45,000 | c) Proposed duration: 4 months.   |



P R O J E C T   P R O F I L E   N O.   S8

P R I O R I T Y: First (short-term)

S U B R E G I O N: Central Africa

1. Project Title: Assistance to the subregional Higher Institute for Appropriate Technology (ISTA)
2. Objective: To assist ISTA in setting up a data bank for industrial projects using appropriate technology.

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3. Promoter/  
  sponsor
4. Location
5. Estimated  
  total cost

6. Project description and additional information

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3. ISTA
4. ISTA,  
  Libreville
5. \$240,000

6. a) Immediate objective: to contribute to the preparation and promotion of industrial projects at the subregional level by adding to the number of projects already in the pipeline at the level of national and subregional development banks, administrations and subregional organizations.
- b) Expected output: a series of project data sheets for use by public and private investors.
- c) Duration: 2 years.

PROJECT PROFILE NO. S9

PRIORITY: First (short-term)

SUBREGION: Central Africa

1. Project Title: Assistance to the African Intellectual Property Organization (AIPO)

2. Objective: To increase the resources of the AIPO and Member States in order to promote industrial property as a technological component in industrial activities as well as in research and development in African States.

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3. Promoter/  
sponsor  
4. Location  
5. Estimated  
total cost

6. Project description and additional information

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3. AIPO  
4. AIPO  
headquarters  
5. To be  
determined

6. a) Background: (i) The setting up of a Patent Documentation and Information Centre within AIPO by project RAF/77/012 (financed by the UNDP, FRG, France, Switzerland and the EEC and completed on 31.12.82) enabled the organization to establish at its headquarters and in Member States (national liaison structures) an institutional infrastructure to serve private industry, research institutions and the national administrative structures; this project aims at promoting the technical and industrial development of Member State countries, providing them with relevant documents and information on inventions. (ii) This project falls within the objectives of (i) above. It is still at the conceptual stage and could be studied in conjunction with such bodies as ECA and UNIDO with which AIPO has signed co-operation agreements.

b) Immediate objectives: (i) Develop and strengthen advisory services offered by the organization in the following fields: - the regulation of technologies (patent contract, technical know-how, etc.); - the evaluation of patented technologies in relation to project profiles, in priority sectors contained in the programme for the Industrial Development Decade for Africa; - the regulation of trade and the exchange of goods or services. (ii) Identify technical areas in the development of strategic industrial sectors defined in the initial programme for the promotion of industrial development in Africa. (iii) Mobilize and train economic operators with respect to the industrial property component in feasibility studies for national industrial projects. (iv) Use scientific and technical information contained in patent documentation so as to support research activities of small-scale industries and national administrative structures.