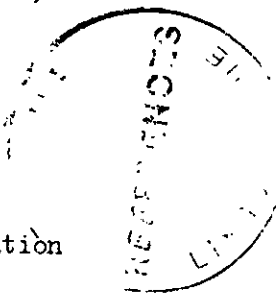


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Follow-up Committee on Industrialization
in Africa
Third meeting

Addis Ababa, 4 and 5 November 1976

PROJECT DOCUMENT ON THE ESTABLISHMENT
OF AN
AFRICAN CENTRE FOR INDUSTRIAL CONSULTING ENGINEERING AND MANAGEMENT

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I. Authority, origin and nature of the proposal

This Centre was accorded high priority by the Lima Declaration and Plan of Action on Industrial Development and Co-operation; 1/ by the second Conference of African Ministers of Industry, held at Cairo in 1973; 2/ and by the third ECA Conference of Ministers held at Nairobi in February 1975. 3/ Other legislative authorities include the Lima Declaration target for industrialization of the African region focusing mainly on basic and strategic industries and small-scale industries for the rural sector; General Assembly resolution on the establishment of the new international economic order; the resolution on the transfer and adaptation of industrial technology adopted by the African Ministers of Industry at their third meeting; and the resolution of the OAU Heads of State and Government adopted in Mauritius.

II. Justification for establishing the Centre

1. Lack of information on available studies on specific projects from international organizations, e.g., ECA, UNIDO, FAO, etc.;
2. Lack of information on alternative sources of technology and equipment;
3. Lack of product market information in neighbouring countries;
4. Lack of adequately skilled personnel to undertake the activities for project identification, formulation and design;
5. Need to organize personnel working in the same sector within the subregion;
6. Lack of technical and managerial capability of entrepreneurs in both private and public industrial enterprises;
7. Lack of consultant services at reasonable prices for small-scale industries;
8. Mounting costs of consultancy services in terms of foreign exchange and service charges;
9. Limited association of indigenous personnel in actual consulting activities to develop experiences;
10. Need to upgrade capability of existing national institutions in this field.

1/ Paragraph 58(b).

2/ Declaration on Industrialization in Africa: Principles and Guidelines for Co-operation and Development.

3/ Conference resolution 256(XII), para. (b) of the third ECA Conference of Ministers.

III. Objectives

1. Project identification;
2. Preparation of feasibility studies and evaluation of feasibility studies on large national and multinational industries;
3. Special attention to feasibility studies for the development of integrated packages of small-scale and rural industries, particularly those utilizing locally available raw material;
4. Managerial skill development;
5. Technical skill development in consulting engineering;
6. Creation of an information system;
7. Creation and strengthening of national capabilities of institutions in this field;
8. Project planning and implementation;
9. Provision on request of technical assistance to the countries and preparation of terms of reference and evaluation of prospective consulting firms in regard to projects.

IV. Modalities of operation

1. Take inventory of existing institutions related to this field and on the basis of consultation with African Governments on national development priorities. Assist Governments in restructuring these institutions to increase their effectiveness and create new ones where they do not exist.
2. Establish effective links with existing institutions in order to ensure a continuous flow of information and technical assistance to the countries.
3. The Centre will concentrate its activities on large national and multinational projects.
4. The Centre will give advisory services, on request by Governments, to similar national institutions in carrying out feasibility studies for setting up integrated packages of small-scale and rural industries.
5. The Centre will ensure that the national institutions are so structured as to be able to supply industrial information collected from inside and outside the region at a minimum cost, through existing chambers of commerce and industry, appropriate local promotional institutions, and through the available mass media and extension works.

6. The Centre will provide technical assistance to enable national institutions to ensure participation of their African personnel in various activities related to national projects. It will also act as a forum for national institutions by bringing them together in workshops to exchange experiences. The same may be done with similar institutions from developed and developing countries.
7. Ensure the participation of competent African counterparts carefully selected for on-the-job training in managerial and technical skill development at regional centres, as well as facilitate African fellowships in developing and developed countries.
8. Secure information concerning problems encountered in the establishment and operation of similar institutions in other developing countries, and what Africa can learn from these experiences.

These are the areas which are entirely neglected by foreign consulting firms. The Centre will provide advisory services to rural industrial enterprises through national institutions on improved equipment and processes, especially from other developing countries, and how they can be set up and managed either collectively or privately, and on alternative ways of utilizing locally available materials. For the larger projects the Centre will provide assistance in:

- (a) site development;
- (b) plant layout;
- (c) subcontracting arrangements;
- (d) supplying of local raw materials and components;
- (e) quality control and standardization;
- (f) marketing and management of the plant itself; and
- (g) maintenance and repairs in agro-based factories, fertilizer factories, agricultural equipment, petrochemical industries, mechanical engineering and supporting tool making industries, etc.

In this regard the Centre should ensure that the relevant information is made available to national Governments through their national institutions and should also inform the Governments about the availability of such information.

V. Interrelationship between the regional centres

1. Choice of technology and processes in collaboration with the Centre for the Transfer, Adaptation and Development of Technology;
2. Financing of feasibility studies in collaboration with AIDF;

3. Feasibility studies in co-operation with the Centre for Industrial Design and Manufacturing (e.g. for the establishment of workshops, foundry and forging facilities, upgrading existing ones, production of tools, equipments, components, engineering instruments, and machine tools);
4. The regional centres should have an overall machinery for co-ordinating their policies and programmes together with AIDF.

VI. Phasing

1. The phasing of the project will be determined finally by the outcome of the field mission.
2. Creating and strengthening of national institutions:
 - assist Governments on request in ongoing priority activities;
 - assist Governments in planned priority areas.

VII. Expected impact

1. Reduction of foreign consultancy fees;
2. Indigenization of expertise on the regional and national levels;
3. Availability of services at short notice;
4. Greater utilization of local raw materials;
5. Increased local value added;
6. Increased employment;
7. Saving of foreign currencies.

VIII. Sources of financing

The sources of financing the Centre and its operations will consist of:

1. Subscriptions and/or grants from member African countries.^{4/}
2. Grants and/or subscriptions from other developing countries (especially oil producers).

^{4/} As to what proportion Africa should contribute to the Centre, opinions are divided. One is to request African Governments to put in as much as two thirds of the Centre's requirements as a concrete sign of self-reliance, while the other view is to leave this open.

3. Grants and/or subscriptions from developed countries.
4. Subscriptions, grants and soft loans from intergovernmental organizations in Africa such as ADB, the Arab Bank for Economic Development in Africa, etc.
5. Technical assistance from bilateral and multilateral sources.
6. Service charges and fees when the Centre is fully operational.

IX. Resource requirements

The order of magnitude of financial resource requirements for the Centre is estimated to be about \$3,777,000 for the initial phase 5/ of operation. However, accurate cost estimates will be made by field experts.

X. Personnel

The qualifications of the personnel required for the Centre will be directly related to the objectives of the Centre. The staff must be such as to enable the Centre to implement at least a minimum effective programme as described in the objectives and modalities. Based on the concept of self-reliance, it is expected that the Centre will be predominantly staffed by Africans. However, in view of the present scarcity of qualified African personnel in this field, the ratio of African staff to expatriates as well as the actual total personnel required will have to be determined by the field missions and the Committee of Experts.

Annex I gives preliminary estimates of the personnel required and the costs implied. Further adjustments are anticipated later in the light of the reports of the field missions.

XI. Location

The choice of location will depend on the following basic criteria:

1. Substantial contributions from host Government;
2. Fair geographical and linguistic distribution of centres;
3. Good communications;
4. Suitable industrial environment;
5. Consideration of reasonable local costs.

5/ See CMI.3/INR/TP/8, para 42.

XII. Organizational set up to be drawn up at a later stage

For tentative suggestion see Annex II.

XIII. Schedule of implementation

1. Preliminary concept ECA/UNIDO - end of September 1976.
2. Internal discussions within JID - 4 October 1976.
3. Final concept by JID - 6 October 1976.
4. Discussions in the Follow-up Committee on Industrialization in Africa - 4 and 5 November 1976.
5. Discussions with selected countries through field missions - November 1976 through February 1977. After field missions ECA/UNIDO meeting to discuss findings and modify centre outline as appropriate - March 1977.
6. Meeting of experts from ministries of finance, industry and planning to draw up the final project document and assessment of country inputs regarding financing - March/April 1977.
7. Meeting of plenipotentiaries on the establishment of the Centre - July 1977.
8. Establishment of the Centre - November 1977.

Project Personnel and Financial Requirements during
Phase I

		Thousand US dollars											
		Total		1977		1978		1979		1980		1981	
		m/m	\$US	m/m	\$US	m/m	\$US	m/m	\$US	m/m	\$US	m/m	\$US
10	Project personnel												
11	Experts												
12-01	Project manager	60	180	12	36	12	36	12	36	12	36	12	36
11-02	Project evaluator	36	108	-	-	-	-	12	36	12	36	12	36
11-03	Statistical assistant	60	75	12	15	12	15	12	15	12	15	12	15
11-04	Research assistant	60	75	12	15	12	15	12	15	12	15	12	15
11-05	Management consultant	60	180	12	36	12	36	12	36	12	36	12	36
11-06	Short-term management consultants	72	216	12	36	12	36	24	72	12	36	12	36
11-07	Chemical engineer	60	180	12	36	12	36	12	36	12	36	12	36
11-08	Chemical engineer	36	108	-	-	-	-	12	36	12	36	12	36
11-09	Mechanical engineer	60	180	12	36	12	36	12	36	12	36	12	36
11-10	Mechanical engineer	60	180	12	36	12	36	12	36	12	36	12	36
11-11	Textile technologist	60	180	12	36	12	36	12	36	12	36	12	36
11-12	Textile economist	60	180	12	36	12	36	12	36	12	36	12	36
11-13	Textile technologist	36	108	-	-	-	-	12	36	12	36	12	36
11-14	Cement technologist	60	180	12	36	12	36	12	36	12	36	12	36
11-15	Clay technologist	36	108	-	-	-	-	12	36	12	36	12	36
11-16	Glass technologist	60	180	12	36	12	36	12	36	12	36	12	36
11-17	Ferrous and ceramics expert	36	108	-	-	-	-	12	36	12	36	12	36
11-18	Mechanical engineer	60	180	12	36	12	36	12	36	12	36	12	36
11-19	Mechanical engineer	36	108	-	-	-	-	12	36	12	36	12	36
11-20	Metallurgist	36	108	-	-	-	-	12	36	12	36	12	36
11-21	Electrical engineer	60	180	12	36	12	36	12	36	12	36	12	36
11-22	Iron and steel expert	60	180	12	36	12	36	12	36	12	36	12	36
11-23	Iron and steel expert	60	180	12	36	12	36	12	36	12	36	12	36
11-24	Short-term consultant	15	45	3	9	3	9	3	9	3	9	3	9
15	Support personnel												
15-01	Secretarial/clerical services	120	50	24	10	24	10	24	10	24	10	24	10
19	Component total	1,359	3,557	219	553	219	553	315	841	303	805	303	805
30	Training component												
31	Training workshops		90		-		-		30		30		30
39	Component total		90		-		-		30		30		30
40	Equipment component												
42	Non-expendable equipment		30		25				5				
49	Component total		30		25				5				
50	Subcontractual services												
51	Specialized consultants		100		20		20		20		20		20
59	Component total		100		20		20		20		20		20
99	Grand total	1,359	3,777	219	598	219	573	315	896	303	855	303	855

Organizational Chart for Centre for
Consulting Engineering and Management

