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

Kampala, Uganda, 13-15 March 1991

**REVISED INTEGRATED INDUSTRIAL PROMOTION PROGRAMME
FOR THE EASTERN AND SOUTHERN AFRICAN SUBREGION
PROPOSALS FOR THE SUBREGIONAL PROGRAMME FOR THE SECOND IDDA**

PROJECT PROFILES

Background document No. 2**

Prepared by
the UNIDO Secretariat

5/65

* This meeting is being organized by UNIDO, in co-operation with the Government of Uganda.

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INTRODUCTION

This document presents the profiles of the projects included in background paper No. 1: Revised Integrated Industrial Promotion Programme for the Eastern and Southern African Subregion, Proposals for the Subregional Programme for the second IDDA (PPD.183(SPEC)).

The revision of the previous integrated industrial promotion programme, and the projects presented here as an input for the preparation of the subregional programme for the second IDDA, have been prepared by the UNIDO Secretariat. This revision is based on information and documents available at UNIDO Headquarters, and on data and other information collected during four preparatory missions fielded by UNIDO in the member countries of the subregion. These missions visited representatives of governmental institutions and research centres concerned with economic development and industrial co-operation, as well as industrial enterprises and leading subregional organizations. Some of the countries visited were not in a position to provide the members of the mission with all the necessary information on the status of projects included in the previous programme or they were not able to propose new projects for possible incorporation in the new subregional programme. Therefore, the list of projects and the project profiles should be considered tentative for the purpose of examination at this subregional meeting.

The document does not include the project profiles of the projects included in the industrial co-operation programmes of the Southern Africa Development Coordination Conference (SADCC) and of the Indian Ocean Commission (IOC). These projects have been tentatively included in the IDDA programme for discussion at the subregional meeting, and only after approval of their inclusion in the IDDA programme will project profiles be elaborated for them as well. The profiles of the projects identified in the Integrated Industrial Development Programme for the Preferential Trade Area for Eastern and Southern States (PTA) have not been incorporated here either because that programme is being revised by the PTA Secretariat and by the meeting of the PTA sub-committee on the the Integrated Industrial Development Programme for the PTA, being held immediately preceding the IDDA Subregional Meeting in Kampala, Uganda. The PTA revised Integrated Programme will be distributed for information and discussion at the IDDA meeting.

NO	PROF. PROJECT	COUNTRIES	DATE	STATUS	SECTOR
PROJECTS IDENTIFIED IN THE FIRST INTEGRATED PROGRAMME (1983)					
1.	(1) Upgrading and Diversification of products from ZISCOSTEEL	Zimbabwe	1983	B	MET
2.	(2) Expansion of iron and steel mill	Uganda	1983	B	MET
3.	(3) Integrated iron and steel mill	Kenya	1983	C	MET
4.	(4) Manufacture of diesel engines for tractors, trucks lorries and buses	Zimbabwe	1983	B	ENG
5.	(5) Manufacture of low-cost standard multi-purpose vehicles	Madagascar	1983	A	ENG
6.	(8) Manufacture of electric motors	Zambia	1983	B	ENG
7.	(8) Manufacture of electric transformers	Zambia	1983	B	ENG
8.	(9) Ethiopian potash	Ethiopia/Libya	1983	B	CHEM
9.	(10) Tanzania multinational ammonia/urea project	Tanzania	1983	C	CHEM
10.	(11) Phosphate fertilizer plant	Uganda	1983	B	CHEM
11.	(12) Production of phosphate fertilizers	Burundi		C	CHEM
12.	(13) Production of caustic soda	Kenya/India	1983	B	CHEM
13.	(14) Sheet-glass production unit	Madagascar	1983	B	CHEM
PROJECTS IDENTIFIED IN THE REVISED INTEGRATED PROGRAMME (1988)					
14.	(1) Establishment of integrated iron and steel mill	Madagascar	1988	B	MET
15.	(2) Establishment of a steel re-rolling mill	Zambia	1988	B	MET
16.	(3) Establishment of multinational sponge iron plants in PTA countries	MOZ/TAN/UGA/ZAM	1988	B	MET
17.	(4) Manufacture of low-cost vehicles	Ethiopia	1988	C	ENG
18.	(5) Spare parts and engineering hand tools factory	Ethiopia	1988	C	ENG
19.	(6) Water pumps factory	Ethiopia	1988	A	ENG
20.	(7) Machine-tool factory	Ethiopia	1988	B	ENG
21.	(8) Tractor- and animal-drawn farm implements factory	Ethiopia	1988	B	ENG
22.	(9) Truck-trailer and bodies factory	Ethiopia	1988	B	ENG
23.	(10) Multi-purpose Engineering workshop	Ethiopia	1988	B	ENG
24.	(11) Establishment of salt refining and packaging plant	Somalia	1988	C	CHEM
25.	(12) Expansion of a Berbera gypsum factory	Somalia	1988	A	CHEM
26.	(13) Rehabilitation of urea fertilizer plant	Somalia	1988	B	CHEM
27.	(14) Manufacture of carbon black	Kenya	1988	C	CHEM
28.	(15) Hollow glass manufacturing plant	Somalia	1988	B	CHEM
29.	(16) Rehabilitation of copper oxychloride plant	Zambia	1988	B	CHEM
30.	(17) Rehabilitation of copper oxychloride plant	Zimbabwe	1988	B	CHEM
31.	(18) Integrated chlor-alkali and PVC plant	Zimbabwe	1988	C	CHEM
32.	(19) Chrome tanning salts	Zimbabwe	1988	B	CHEM
33.	(20) Production of caustic soda	Tanzania	1988	B	CHEM
34.	(21) Lake Natron soda ash project	Tanzania	1988	B	CHEM
35.	(22) Mbagala sheet glass project	Tanzania	1988	C	CHEM
36.	(23) Production of cement in Indian Ocean Island countries	Madagascar/IOC	1988	B	BUIL
37.	(24) Cement blending and packaging plant (and extension of the existing railway line)	Lesotho	1988	B	BUIL
38.	(25) Edible oil production	Lesotho	1988	B	AGRO
39.	(26) Coconut processing programme	Comoros	1988	C	AGRO
40.	(29) Fish-processing facilities	Uganda	1988	A	AGRO

NO	PROF. PROJECT	COUNTRIES	DATE	STATUS	SECTOR
<u>NEW PROJECTS INCLUDED IN THE NEW INTEGRATED PROGRAMME (1991)</u>					
41.	Production of galvanized steel wire and light structural products	Lesotho/PTA	1991	B	MET
42.	Establishment of a joint-venture for bicycles assembling	SWA/MOZ	1991	B	ENG
43.	Expansion of existing production of pumps for irrigation and rural water supply	SWA/ZIM	1991	B	ENG
44.	Expansion of Lesotho Pharmaceuticals factory	Lesotho/PTA	1991	B	CHEM
45.	Revitalization of cement formulation plant	SWA/MOZ	1991	B	CHEM
46.	Expansion of Swaziland textile industries	SWA/ZIM/MOZ/MAW	1991	C	AGRO
47.	Meat processing joint-venture	Namibia/Botswana	1991	B	AGRO
48.	Establishment of an animal glue factory	Botswana/PTA	1991	B	AGRO
49.	Establishment of an integrated textile complex	Lesotho/ZAM/ZIM	1991	B	AGRO
<u>PROJECTS NOT RETAINED IN THE NEW INTEGRATED PROGRAMME (1991)</u>					
1.	(6) Irrigation equipment plant	Zambia	1983	NO	ENG
2.	(7) Copper fabrication plant for Eastern and Southern Africa	Zambia	1983	NO	ENG
3.	(27) Cotton Weaving plant	Lesotho	1988	NO	AGRO
4.	(28) Blanket manufacture	Lesotho	1988	NO	AGRO
<u>SUPPORT PROJECTS IDENTIFIED IN THE FIRST INTEGRATED PROGRAMME (1983)</u>					
1.	S1. Transformation of Severe research station into a subregional R & D centre	Uganda/ECA-MULPOC	1983	C	IB
2.	S2. Assistance to the African Regional Organization for standardization (ARSO) and the African Institute for Higher Technical Training and Research (AIHTTR)	ARSO/AIHTTR/ ECA/OAU/UNIDO	1983	C	IB
3.	S3. Inventory of subregional training facilities	SADCC	1983	C	DS
4.	S4. Managerial and Technical personnel training	SADCC	1983	C	DT
5.	S5. Development of industrial consultancy and management capabilities	SADCC	1983	C	IB
6.	S6. Development of local entrepreneurship (Directory of small-scale industrial project profiles)	ECA/UNIDO/OAU	1983	C	DS
7.	S7. Improvement and development of the cement industry	SADCC	1983	C	IB
<u>SUPPORT PROJECTS IDENTIFIED IN THE REVISED INTEGRATED PROGRAMME (1988)</u>					
8.	S1. Upgrading of Kenya Textile Training Institute (KTTI) into a subregional training centre	Kenya	1988	C	IB
9.	S2. Upgrading of Ethiopian Management Institute into a subregional centre	Ethiopia	1988	C	IB
10.	S3. Regional Sugar Cane Training Centre for Africa (RSCTCA)	Mauritius	1988	B	IB
11.	S4. Upgrading of Management Training and Advisory Centre (MTAC) into a subregional centre	Uganda	1988	C	IB
12.	S5. Upgrading of training and design facilities of the spare parts manufacturing plant into a subregional centre	Ethiopia	1988	C	IB
13.	S6. Establishment of a cement institute at the Murgher cement plant	Ethiopia	1988	C	IB
14.	S7. Upgrading the Mogadishu Industrial Vocational Training Centre (IVTC) into a subregional centre	Somalia	1988	C	IB
15.	S8. Establishment of a Metallurgical Technology Centre for PTA countries	Zimbabwe	1988	B	IB
16.	S9. Promotion of spare parts production PTA countries	KEN/TAN/ZIM	1988	C	IB
17.	S10. Tanzania Institute of Leather Technology	Tanzania	1988	C	IB
18.	S11. Consolidation of the Institute of Cement Technology	Tanzania	1988	C	IB
19.	S12. Establishment of a pilot and demonstration physical manufacturing facilities at TEMCO	Tanzania	1988	C	P
20.	S13. Establishment of a pilot demonstration toolroom and engineering design centre	Zimbabwe	1988	C	IB

NO	PROF. PROJECT	COUNTRIES	STATUS	SECTOR
NEW SUPPORT PROJECTS INCLUDED IN THE NEW INTEGRATED PROGRAMME (1991)				
21.	Study to assess the potential for adding value to commodities passing through Namibia from neighbouring countries	SADCC	C	DS
22.	Study on the impact of the construction of the Trans-Kalahari Road to generate industrial ventures projects with countries in the subregion	BOT/SUBREGION	C	DS
23.	Assistance in exploring and establishing links (e.g. SADCC) to project information registers, import agencies and trade organizations which could put Namibian exporters in contact with an increasing number of customers	NAM/SADCC	C	DS
24.	Assessment of the potential spin-off of the SUA PAN soda ash project and possible partnerships and complementarities with countries in the subregion to process by-products	BOT/SUBREGION	C	DS
25.	Establishment of diamonds cutting facilities and training centre	NAM/BOT	C	IB
26.	Update a feasibility study to exploit coal reserves as alternative source for energy production to be exported to neighbouring countries	BOT/ZIM/ZAM	C	DS
27.	Strengthen the capabilities for monitoring, follow-up and control of trade protocols and agreement of the PTA Secretariat	PTA	C	IB
28.	Processing of semi-precious stones (SSI)	LES/SUBREGION	C	DS
29.	Feasibility study for the exploitation of phosphate reserves in the Barren islands	MAG/IOC	B	DS
30.	Market study for the production of fishing nets	MAG/SUBREGION	B	DS
31.	Promotion of co-operation among SSI in IOC countries	IOC	C	IB
32.	Programme and fund to support the establishment of joint-ventures between partners in the subregion	ICC	C	IB
33.	Programme for the promotion of export of industrial products and assistance to the packaging industry	IOC	B	DS
34.	Programme for standardization, quality control and metrology in IOC countries	IOC	A	IB
35.	Establishment of a textile technology centre	IOC/SUBREGION	B	IB
36.	Expansion of an existing marine resources training and research centre	IOC/SUBREGION	C	IB

NO	PROF.	PROJECT	COUNTRIES	STATUS	SECTO
PTA INDUSTRIAL PROJECTS (1993)					
1.	MET/01	Initiation of activities of the PTA Metallurgical Technology Centre	PTA	B	IB
2.	MET/02	Product rationalization and upgrading in iron and steel plants/rolling mills in the PTA subregion	PTA/ETH/MOZ/MAU/KEN/TAN	C	DS
3.	MET/03	Rehabilitation and expansion of the East African Steel Corporation Mill in Uganda	UGANDA/PTA	B	DS
4.	MET/04	Development of a programme for the production of sponge iron in the PTA subregion	PTA/MOZ/TAN/UGA/ZAM/ETH	C	DS
5.	MET/05	Integrated Development Programme for metal surface treatment in PTA countries	PTA	C	DS
6.	ENG/01	Initiation of a CAD/CAM demonstration network for the PTA	PTA/ETH/KEN/MAW/TAN	B	IB
7.	ENG/02	PTA programme for the production of spare parts	PTA/KEN/MAW/MAU/SOM/TAN/UGA/ZAM/ZIM	C	DS
8.	ENG/03	Feasibility study on the expansion and development of machine tool production for PTA countries	PTA/Tanzania	C	DS
9.	ENG/04	Metal fabrication unit for the building industry	PTA/Lesotho	C	DS
10.	ENG/05	Policy analysis and feasibility evaluation of the indigenous subregional prod. of hospital equipment and its maintenance	PTA	C	DS
11.	ENG/06	Pilot development of a regional network of industrial sub-contracting exchange	PTA/KEN/ZIM/MAU/TAN	C	IB
12.	ENV/01	Preparation and dissemination of a model environment Impact Statement	PTA	C	DS
13.	ENV/02	Safer pesticide formulation/application technology	PTA/RWA/KEN/SOM	C	IB
14.	ENV/03	Establishment of a demonstration plant for the production of non-persistent, non-chlorinated insecticides	PTA	C	P
15.	ENV/04	Small-scale industrial waste water treatment Pilot testing installation	PTA	C	P
16.	ENV/05	Industrial safety and accident prevention system	PTA	C	IB
17.	CHEM/01	Industrial chemicals from indigenous carbohydrate in PTA	PTA	C	DS
18.	CHEM/02	Building a regional essential oil industry	PTA/ETH/KEN/MAW/RWA/ZAM	C	DS
19.	CHEM/03	Consumption/production survey of industrial surfactants in the PTA countries	PTA	C	DS
20.	CHEM/04	Diagnostic survey of plastic transformation industries in the PTA countries	PTA	C	DS
21.	CHEM/05	Situation analysis of the development of the petrochemical industry in the PTA countries	PTA	C	DS
22.	CHEM/06	Establishment of a regional inorganic Salts Technology Development Centre (ISTDC)	PTA	C	IB
23.	CHEM/07	Establish. of a subregional centre for the development and production of Plant Medicinal Prod. for pharmaceutical use	PTA	C	IB
24.	CHEM/08	Prefeasibility study for a fertilizers formulation plant	Lesotho/PTA	C	DS
25.	CHEM/09	Pilot demonstration scheme for more efficient phosphatic fertilizers solubization and absorption by a crop plant	PTA/Burundi	C	EXP
26.	CHEM/10	Rehabilitation of the urea ammonia plant in Somalia	Somalia/PTA	C	DS
27.	CHEM/11	Inter-regional approach for the development of pesticides of botanical origin	PTA/ASIA	C	DS
28.	CHEM/12	Development of prototype mobile seed dressing applicators	MAW/KEN/SOM/TAN/UGA/ZAM	C	EXP
29.	AGRO/01	Sugar Industry Regional Training Centre	Mauritius/PTA	C	IB

NO	PROF.	PROJECT	COUNTRY	STATUS	SECTO
30.	AGRO/02	Training strategy for human resources in food processing testing and quality control	PTA/Mauritius	C	IB
31.	AGRO/03	R&D Programme for food technologists	PTA/Tanzania	C	IB
32.	AGRO/04	Identification of the opportunities of establishing fish processing plants	PTA/Zambia	C	DS
33.	AGRO/05	Blanket manufacturing plant in Lesotho	Lesotho	C	DS
34.	AGRO/06	Regional Centre for Textile Industry	PTA	C	IB
35.	AGRO/07	Training strategy for the Development of an integrated Production and Technology management system for textile industry in Kenya for PTA countries	PTA/Kenya	C	IB
36.	AGRO/08	Establishment of a Leather Research and Technology Centre for PTA subregion	PTA/Ethiopia	C	IB
37.	BUIL/01	Rehabilitation and rationalization of cement production in the PTA subregion (second phase)	PTA	C	DS
38.	BUILD/02	Assessment of rehabilitation requirements of glass plant in Tanzania and the development of a glass programme for the PTA subregion	TAN/BUR/PTA	C	DS
39.	HRS/01	Training Strategy for the development of human resources for the promotion and management of SSI in the PTA subreg.	PTA/Tanzania	C	IB
40.	HRS/02	Industrial Managment Development Programme for the PTA	PTA/UGA/ZIM	C	IB
41.	HRS/03	Assistance to PTA member states in the promotion of standardization and quality control systems	LES/SWA/RWA/SOM/DJI/COM	C	IB
42.	HRS/04	Promotion and commercialization of small-scale industrial/rural technologies in the PTA subregion through the developmet of technoly centre	PTA/Zimbabwe	C	IB
43.	HRS/05	Programme for the promotion and development pf small-medium-scale industrial activities in the PTA subregion with particular emphasis on women in industrial development	PTA/SEDCO/Zimbabwe	C	IB
44.	HRS/06	Programme for the development of manpower capabilities for project identification, formulation monitoring and evaluation	PTA/Zimbabwe	C	IB
45.	HRS/07	Pilot study on the development of an industrial R&D Progr.	PTA	C	DS
46.	HRS/08	Industrial services Register and Development of an industrial services clearing house	PTA/Rwanda	C	DS
47.	HRS/09	A manufacturing investment trust for the PTA	PTA	C	DS
48.	HRS/10	Regional Centre for standardization and quality control with emphasis on packaging materials	PTA/Malawi	C	IB
49.	HRS/11	Intra-regional co-operation for small-scale industry promotion	PTA/Zambia	C	IB
50.	ENY/01	Power plant rehabilitation	PTA	C	DS
51.	ENY/02	Industrial energy conservation and auditing programme for the PTA countries	PTA	C	IB
52.	ENY/03	Programme for the utilization of woodwastes from existing forest plantation and forest industries for more efficient charcoal production in PTA subregion	PTA	C	P

NO	PROJECT	COUNTRIES	STATUS	SECTOR
<u>SADCC INDUSTRY AND TRADE PROJECTS</u>				
1.	Support to SADCC Industry and Trade Co-ordination Division	SADCC	A	IB
2.	Standardization and quality control	SADCC	A	IB
3.	Engineering Design and Product Development	SADCC	A	DS
4.	Establishment of Information Exchange Centre	SADCC	A	IB
5.	Development Small/medium scale industries (study/workshop)	SADCC	B	DS
6.	Research and Development (Study)	SADCC	A	DS
7.	Management and skills Development	SADCC	B	DT
8.	Study on the improvement of the investment climate	SADCC	B	DS
9.	A system of Direct Trade Measures including bilateral trade agreements	SADCC	B	DS
10.	General System of Preference Study	SADCC	A	DS
11.	Trade Directory	SADCC	B	DS
12.	Participation of SADCC firms in SADCC projects	SADCC	B	DS

IOC INDUSTRY AND TRADE PROJECTS

1.	Exchange of information and strengthening of co-ordination facilities	IOC	B	IB
2.	Establishment of a common system for foreign purchasing	IOC	B	DS
3.	Strengthening of export promotion structures	IOC	B	IB
4.	Strengthening of marketing capabilities for agriculture and non-agriculture products	IOC	B	DS
5.	Reduction and harmonization of tariff/non-tariff barriers	IOC	B	DS
6.	Establishment and accreditation of a union for on industrial development and co-operation	IOC	C	IB
7.	Establishment of a Committee for the promotion of industrial co-operation	IOC	B	IB
8.	Preliminary study for the establishment of a regional shipping line	IOC	B	DS
9.	Feasibility study for the establishment of a regional shipping line (if necessary)	IOC	B	DS
10.	Inventory of the to the free movements of persons	IOC	B	DS
11.	Inventory of the obstacles to the free movements of capital	IOC	B	DS
12.	Study import duties	IOC	C	DS
13.	Comparative study of investments codes and regulations	IOC	B	DS
14.	Preliminary study of industrial branches	IOC	B	DS
15.	Study on the testing and quality control laboratories	IOC	B	DS

PROJECT PROFILE NO. 1

DATE OF PROPOSAL: 1983 LAST UPDATE: 1988 SUBSECTOR: Metallurgical industry (iron and steel)

1. Project Title: Upgrading and diversification of products from ZISCOSTEEL (Zimbabwe)

2. Objective: To upgrade or rehabilitate most of the major production equipment at ZISCO.

3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
3. ZISCO and subsidiary companies BINCO and LANCASHIRE STEEL.	5. Pre-feasib. studies completed. Overall project consultants appointed and will soon start work.	7. Iron ore, coke, limestone, diesel fuel/oil.
4. Redcliff, Midlands Province, Zimbabwe.	6. Subregion to assist in the promotion of the utilization of the products. UNDP/UNIDO, ADB and other funding organizations will assist in raising the finances.	8. All available as per ZISCO current programme.
10. Projected demand by product	12. Capacity by product	9. ZISCO and subsidiary infrastructure available.
11. Market	13. Total investment	14. Additional information including collaboration arrangements already made and type of participation sought by Member States
10. Zimbabwean and subregional demand for iron and steel products is well documented. Details in sub-projects.	12. Overall capacity of ZISCO of about 1 million tons liquid steel will not change, but efficient plants will contribute to more consistent production and better quality.	14. Existing equipment is very old and therefore becoming inefficient. The upgrading involves the following set of projects: 1. Iron-ore restructuring, including burden-preparation. 2. Sinter plant. 3. Recline of blast furnace number 4. 4. Desulphurizing plant. 5. Replacement and modernization of LD vessels. 6. Slab caster. 7. Cold strip mill. 8. Bar/rod mill modification. 9. Rebuilding of battery 3 or 4. 10. Benzol refining and tar distillation plant. 11. Steel centre. 12. Power station. 13. Effluent treatment plant.
11. Both local and subregional markets, details of which are outlined in the sub-projects listed under 14.	13. At about Z\$1 billion, 50 per cent of which will be foreign exchange.	

PROJECT PROFILE NO. 2

DATE OF PROPOSAL: 1983 LAST UPDATE: 1991 SUBSECTOR: Metallurgical industry (iron and steel)

1. Project Title: Expansion of iron and steel mill (Uganda)

2. Objective: To exploit known iron ore deposits for use in expanded steel plant.

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

3. Ministry of Industry, Uganda.	5. Conceptual stage.	7. Existing steel plant utilizes imported billets/ ingots and local scrap at present, but expanded plant will utilize locally extracted iron.
4. Uganda.	6. Feasibility study to establish viability, including detailed study of market and future demand in terms of volume and product mix.	8. Energy required is available (630-700 million kWh/p.a.)
		9. (a) Steel plant in operation but requires expansion. (b) Primary metal facilities still to be developed. (c) Transport facilities between the iron ore beds and the steel/iron plant still 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. Information not available.	12. (a) <u>Present</u> 25,000 p.a.: steel intermediates (rods, bars, sections and strips). (b) <u>Expanded</u> 100,000 tons p.a.: current steel intermediates and additional unspecified items.	14.(a) The mill expansion in the original project has been initiated and funds secured. A new facility has been in operation since 1983, and its possible expansion is being considered. A third (sponge- iron) project is also being considered. b) Although no collaboration arrangements entered into so far, Government welcomes economic co-operation with multilateral sources in the form of consultancy foreign capital and technological know-how.
11. Local market (70%), export to neighbouring countries (30%). A national study on availability of local scrap and on demand for iron and steel has been carried out.	13. Estimated at \$600 million, excluding costs of infrastructure.	

c) The Government and local private sources could provide up to 30% of the estimated total investment, the balance coming from multilateral sources: the structure of ownership flexible.

d) Terms of co-operation are subject to negotiation between Government and potential partners.

e) Information about manpower requirements not available, but training of local personnel necessary.

15. Remarks:

Project also included in Integrated Industrial Development Programme for the PTA as MET/03, "Rehabilitation and expansion of the East African Steel Corporation mill in Uganda". The mill has been assisted through several short-term UNIDO projects. A major current problem is a shortage of working capital.

PROJECT PROFILE NO. 3

DATE OF PROPOSAL: 1983 LAST UPDATE: 1991 SUBSECTOR: Metallurgical industry (iron and steel)

1. Project Title: Integrated iron and steel mill (Kenya)
2. Objective: To establish a new corporation for the manufacture of basic iron and steel raw materials, including hot rolled coils and billets.

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

3. Ministry of Industry, Kenya.	5. Feasibility study was prepared in June 1982 by Austroplan and reviewed by Common- wealth Secretariat in October 1984.	7. Iron ore, manganese ore and coking coal are to be imported. Limestone fluorspar and scrap are locally available.
4. Mombasa, Kenya.	6. Feasibility study needs updating in the light of change in the project concept.	8. Energy requirements to be worked out in new study.
		9. Available.

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

10. 524,600 tons in 1990; 735,800 tons in 1995; and over 1 million tons in 2000.	12. Proposed production programme: a) <u>Non-flat products</u> : 103,650 tons in 1995 and 241,250 tons in 2000. b) <u>Flat products</u> : 316,400 tons in 1990; 445,000 tons in 1995; 611,400 tons in 2000.	14. (a) No collaboration arrange- ment entered into yet. (b) Participation and assistance sought in respect of: (i) Preparation of a feasibility study; (ii) External loan and credit financing for the project; (iii) Supply of necessary technology.
11. Mainly geared to domestic market, but export oppor- tunities to neighbouring countries exist.	13. Needs to be worked out in the light of the new project concept.	

15. Remarks: Project still has high Government priority. Requires geological surveys to determine quantity and quality of domestically available iron ore and limestone, as well as comprehensive study of iron and steel sector in Kenya to facilitate decision-making. Feasibility study of 1982 no longer appears adequate.

PROJECT PROFILE NO. 4

DATE OF PROPOSAL: 1983 LAST UPDATE: 1988 SUBSECTOR: Engineering industry (engine manufacture)

1. Project Title: Manufacture of diesel engines for tractors, trucks, lorries and buses (Zimbabwe)

2. Objective: To develop manufacture of road transport equipment and agricultural machinery.

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

3. Second meeting of Intergovernmental Committee of initially. Experts on Engineering Industries for Eastern and Southern Africa following the recommendations of the Sixth Meeting of the Lusaka-based MULPOC Council of Ministers.	5. Project expected to become operational at the end of 1988 as project approval had been obtained from the Ministry of Industry.	7. Grey cast iron and forging quality steel will be available in the subregion. Quality steel to be imported
	6. Expansion to cover the subregional market.	8. Energy available.
		9. Physical infrastructure proposed.

4. Zimbabwe.

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

10. 100,000 units p.a. (1990) 237,000 units p.a. (2000).	12. 30,000 p.a. on one-shift basis and 90,000 p.a. on three-shift basis.	14. T.A Holdings Ltd of Zimbabwe has entered into a joint venture with a company to reassemble diesel engines and to repower, refurbish repair and service of all makes of trucks. Output would include stationary diesel engines and marine engines as well.
11. Supplies to tractor factory and lorries/trucks/buses chassis factories proposed for the subregion.	13. (a) Pre-investment studies: \$300,000 (b) Total basic investment: \$80 million.	

PROJECT PROFILE NO. 5

DATE OF PROPOSAL: 1983 LAST UPDATE: 1991 SUBSECTOR: Engineering industry (road transport)

1. Project Title: Manufacture of low-cost standard multi-purpose vehicles (Madagascar)

2. Objective: To develop manufacture of road transport equipment suited to rural needs.

3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
3. Institut Malgache d'Innovation (IMI).	5. Completed and operational since November 1987.	7. Mechanical parts, chassis and coachwork.
4. Fianarantsoa, Madagascar.	6. Expansion to cover the subregional market.	8. 500,000kW.
10. Projected demand by product	12. Capacity by product	9. Buildings, equipment and access road completed.
11. Market	13. Total investment	14. Additional information including collaboration arrangements already made and type of participation sought by Member States
10. Not known.	12. 300 light cars (5-seaters) (present production per year).	14. Promoter looking for local or subregional partner to market the vehicles in the subregion.
11. Domestic.	13. FMG3,670 million.	

15. Remarks: The current production is very low: less than 300 vehicles per year, for the domestic market only. From information gathered during the preparatory missions it seems that the promoter is not any longer looking for a subregional partner or to export to the subregion. Therefore the meeting is requested to decide whether to retain or withdraw the project from the IDDA subregional programme.

PROJECT PROFILE NO. 6

DATE OF PROPOSAL: 1983 LAST UPDATE: 1991 SUBSECTOR: Engineering industry (energy equipment)

1. Project Title: Manufacture of electric motors (Zambia)
 2. Objective: To manufacture electric motors.

3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
3. INDECO Ltd, Zambia.	5. Negotiations for implementing the project have reached an advanced stage.	7. Copper wire from Zambia Metal Fabricators Ltd. (ZAMEFA) Casting to be manufactured in existing foundries and later in the new central engineering factory currently being developed, other materials will initially be imported and later domesti- cally produced.
4. Lusaka, Zambia.	6. PTA/UNIDO to assist in securing finance.	8. Available.
		9. Other infrastructure available, but buildings to be constructed.
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. Domestic demand for new motors (0.5 to 125 h.p.) Total demand for Eastern and Southern Africa estim. 25000 p.a. Estim. increase 7 per cent p.a.	12. Planned production and service programme <u>Year</u> <u>Prod.</u> <u>Serv.</u> 1-2 1000 1000 3-4 1200 1200 5-6 1500 1500	14. Attempting to establish joint venture with Scandinavian partner company
11. Subregion	13. 1989 estim. total investment for both projects 6 and 7 (electric motors and transformers) ZMK 150m, of which foreign cost ZMK 60m (exchange rate used ZMK 18 = US\$1	
15. <u>Remarks:</u> Projects 6 and 7 were originally conceived as one integrated project with electric motors as phase one and transformers as phase two. Government now intends to implement 2 separate projects with 2 different foreign partner firms.		

PROJECT PROFILE NO. 7

DATE OF PROPOSAL: 1983 LAST UPDATE: 1991 SUBSECTOR: Engineering industry (energy equipment)

1. Project Title: Manufacture of electric transformers (Zambia)

2. Objective: To manufacture electric transformers.

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

3. INDECO Ltd, Zambia.	5. Negotiations for implementing the project have reached an advanced stage.	7. Rolled and drawn copper rods and copper strips available locally. Steel channel sections and angles available in the subregion; other raw materials to be imported from the subregion.
4. Lusaka, Zambia.	6. PTA/UNIDO to assist in securing finance.	8. Available.
		9. Other infrastructure available, but buildings to be constructed.

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. Domestic demand estim. 1500 p.a. Total demand for Eastern and Southern Africa, estim. 4000 p.a. Estim. increase 7 per cent p.a.	12. Planned production and service programme <table><thead><tr><th>Year</th><th>Prod.</th><th>Serv.</th></tr></thead><tbody><tr><td>1-2</td><td>200</td><td>150</td></tr><tr><td>3-4</td><td>300</td><td>200</td></tr><tr><td>5-6</td><td>450</td><td>250</td></tr></tbody></table>	Year	Prod.	Serv.	1-2	200	150	3-4	300	200	5-6	450	250	13. 1989 estim. total investment for both projects 6 and 7 (electric motors and trans- formers) ZMK 150m, of which foreign cost ZMK 60m (exchange rate used ZMK 18 = US\$1)
Year	Prod.	Serv.												
1-2	200	150												
3-4	300	200												
5-6	450	250												

11. All electricity enterprises in the subregion	14. Attempting to establish a joint venture with Scandinavian partner company
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15. Remarks: Projects 6 and 7 were originally conceived as one integrated project with electric motors as phase one and transformers as phase two. Government intends to implement 2 separate projects with 2 different foreign partner firms.

PROJECT PROFILE NO. 8

DATE OF PROPOSAL: 1983 LAST UPDATE: 1988 SUBSECTOR: Chemical industry (fertilizers)

1. Project Title: Ethiopian potash (Ethiopia/Libya)

2. Objective: To exploit potash deposits and meet multicountry/subregional demand.

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

3. Ethio-Libyan Joint Mining Co.	5. First phase of feasibility study completed in 1987 by PEC engineering France and reviewed by an independent consultant.	7. Sylvinite: 160 million tons. The total potential reserves of potash could be several billion tons.
4. Dallol, Ethiopia.		8.

Potentially available: geothermal.

	6. Completion and evaluation of feasibility study.	9. 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. Combined demand for potassium chloride and potassium sulphate in the subregion is expected to rise to 133,000 tons K ₂ O in 1990 and 232,000 tons by 2000, as against 50,000 tons in 1979.	12. 1.5 million tons of potassium chloride from underground mining of sylvinite ore.	14. (a) First phase of study concluded that the project was technically feasible, but that an economic study was also needed. Consultants recommended the underground, open pit and solution method of mining. (b) Second phase of studies temporarily suspended owing to logistical problems in project area. (c) Government submitted project to PTA Secretariat in October 1987 with request to arrange transfer of technology for mining, processing and developing a potash-based chemical industry, as well as financing the project and marketing the product.
11. Principal markets for Ethiopian potash are outside Africa, since nature of African soil is unsuitable for potassic fertilizers.	13. Investment of \$500 million, including outlay for harbour and rail facilities.	

PROJECT PROFILE NO. 9

DATE OF PROPOSAL: 1983 LAST UPDATE: 1988 SUBSECTOR: Chemical industry (fertilizers)

1. Project Title: Tanzania multinational ammonia/urea project (Tanzania)
2. Objective: Using natural gas reserves to produce ammonia/urea and meet multicountry/subregional demand.

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

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| 3. Government of Tanzania. | 5. Finance only partly secured through pledges. | 7. National gas reserves one trillion (10 ¹²) cubic feet, enough to supply the plant for 60 years at a rate of 16 million cubic feet/year. None of the four plants currently operational in the PTA countries use natural gas; they preferred feedstock. |
| 4. On Kilwa Masoko shoreline, 150 miles south of Dar-es-Salaam, Tanzania. | 6. Long-term purchase agreement with countries in the subregion. There is need to investigate the concerns of Malawi. | 8. Hydroelectric power supply from national grid. |
| | | 9. Road being 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 | |
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| 10. No information available. | 12. 1,150 ton/day ammonia and 1,750 ton/day urea. | 14. Action has been taken to mobilize financial assistance, particularly pledges, some of which have been outstanding for 4 years. Definitive courses of action need to be taken on the basis of a well-articulated strategy for implementing the project, to which the Government has accorded priority. |
| 11. Domestic and SADCC subregion, initially export-oriented. | 13. \$425 million, local component \$20 million. | |

PROJECT PROFILE NO. 10

DATE OF PROPOSAL: 1983 LAST UPDATE: 1991

SUBSECTOR: Chemical industry (fertilizers)

1. Project Title: Phosphate fertilizer plant (Uganda)
 2. Objective: To establish new facilities incorporating existing fertilizer plant.

3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
3. Government of Uganda (TICAF).	5. Company being formed with Government of Uganda playing leading role in collaboration with prospective investors and PTA Secretariat.	7. Phosphate rock and pyrites, and imported sulphur. Phosphate reserves are estimated at 230 million tons (12.8 per cent P ₂ O ₅).
4. Uganda (Tororo).	6. Meeting of co- financiers planned for March/April 1991.	8. Hydroelectric power from electric grid.
10. Projected demand by product	12. Capacity by product	9. Adequate.
11. Market	13. Total investment	14. Additional information including collaboration arrangements already made and type of participation sought by Member States
10. Based on past trends, subregional demand is estimated at 1.3 million tons by 2000.	12. Triple super phosphate	14. (a) The Government of Uganda is willing to involve other Member States in the sub- region in technical services, marketing and equity. (b) TICAF plant closed since 1978. (c) Consultant to draw up tender documents to be appointed early 1991. (d) Technical partners to be identified and agreement to be concluded by March/April 1991, with assistance of ADB in consultation with Govern- ment of Uganda or its agency and PTA. (e) Construction planned to begin by September 1991.
11. Extends beyond subregion to other countries in the Central African subregion. 20 to 30 per cent of the planned capacity could be absorbed by Uganda.	13. \$127 million. (loan component: US\$61.2 million through ADB and US\$24.3 million through suppliers credit; equity contri- bution: US\$41.8 million, of which Uganda Government US\$21.3 million and PTA local investors US\$2.2 million secured).	
15. <u>Remarks:</u> As stated at the PTA Committee on Industrial Co-operation meeting in Nairobi in September 1990, international financing institutions, including the African Development Bank (ADB), have announced their willingness to participate. Ugandan equity participation has been secured from both the public and private sector and Kenyan private sector participation has also been agreed. Other investors from both within and outside the subregion have shown serious interest.		

PROJECT PROFILE NO. 11

DATE OF PROPOSAL: 1983 LAST UPDATE: 1988 SUBSECTOR: Chemical industry (fertilizers)

1. Project Title: Production of phosphate fertilizers (Burundi)^{a/}

2. Objective: Manufacture of fertilizers using phosphate.

3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
3. Burundi.	5. Pre-feasibility study completed.	9. Physical infrastructure
4. Matongo, the proximity of the deposits.	6. Complete market studies as con- firmation of feasibility.	7. Phosphate deposits in Matongo. ^{b/}
		8. Energy from Rwegura dam, situated 20kms 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. Will be determined on basis of market survey which covered countries outside the CEPGL.	13. \$40 million according to the feasibility studies.	

^{a/} It was agreed to include this project in the project for the Eastern and Southern African subregion on account of the fact that the project, which had also been retained in the revised subregional programme for Central Africa (see document ID/WG.456/3/Rev.1, 4 March 1986, page 47, profile No. 4), was fully integrated within the PTA programme and served Burundi, Rwanda and Tanzania.

^{b/} Reserves: 9,297,175 tons with a phosphate content of 7 per cent (weighted average of 13.3 per cent P₂O₅). 13,716,350 tons with a phosphate content of 5 per cent (weighted average of 11.5 per cent P₂O₅). These reserves are minimal.

PROJECT PROFILE NO. 12

DATE OF PROPOSAL: 1983 LAST UPDATE: 1991 SUBSECTOR: Chemical industry (basic chemicals)

1. Project title: Production of caustic soda (Kenya)

2. Objective: To establish a caustic soda production enterprise.

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

3. Alkali Industries (K) Ltd.	5. Feasibility study carried out in 1978. Alkali (K) Ltd have revised the study in 1988 and propose to implement it.	7. (a) <u>Locally available</u> : Limestone and soda ash. (b) <u>Imported</u> : Sodium nitrate, sulphur and hydrochloric acid.
4. Kajiado district, Kenya.	6. The proposal has been approved by the Ministry which is waiting to see whether the proposers implement the project.	8. Per ton of caustic soda: steam at 8.5 ATA, 3,300 kg; electricity for lighting only: 250 kWh; and coke for lime-burning: 300 kg (approximate figures).
		9. Rail and tarmac road set up to facilitate exploitation of natural soda ash in the district.

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. No information.	12. 40,000 tons.	14. (a) Manpower requirements are estimated at 50 technical staff; (b) A joint venture between Binla Technical Services (India) and Alkali Industries (Kenya) has been recently formed with production expected to start in 1988.
11. Local: 12,000 tons. Region: 30-40,000 tons.	13. Estimated at \$5.8 million, including land, buildings, machinery, equipment, shake-down costs, contingencies and working capital.	

15. Remarks: Modalities for implementing joint venture with Binla Technical Services still under discussion, including questions regarding technology, costs etc.

PROJECT PROFILE NO. 13

DATE OF PROPOSAL: 1983 LAST UPDATE: 1991 SUBSECTOR: Chemical industry (ancillary products)

1. Project Title: Sheet-glass production unit (Madagascar)

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

3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
3. Government.	5. Opportunity study completed in 1987.	7. Sand, quartz, dolomite and felspar locally available. Other raw materials (soda ash, sodium sulphate, borax fluorspar and cryolite) to be imported.
4. Toamasina, Madagascar.	6. (i) Consultations with other countries of the subregion for their participation in the project; (ii) Feasibility study; (iii) Mobilization of investment.	8. Fuel oil. 9. Working of sand pit and mining of quartz and felspar will have 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. 13,500 tons p.a. sheet- glass and 11,200 tons p.a. hollow glass in the Indian Ocean islands.	12. 16,740-20,385 tons of crude glass of both types per year.	14. According to opportunity study: (i) a unit to manufacture only sheet- glass is not feasible; (ii) it recommended reha- bilitation and expansion of the existing SOVEMA hollow glass factory at Tamatave (closed since July 1984) and its use as an integrated plant to produce both sheet- and hollow glass; (iii) the project will require market-sharing arrangements with other countries in the subregion, especially Mauritius; (iv) manpower requirements: 261 nationals and four expatriates.
11. Madagascar and other Indian Ocean islands in the subregion.	13. <u>Sheet-glass</u> : local: FMG3,450 mill. foreign: FMG17,383 mill. <u>Hollow glass</u> : local: FMG1,956 mill. foreign: FMG1,861 mill. Grand total: FMG24,650 million (including civil works).	
15. <u>Remarks</u> : A preliminary market study carried out by the project evaluation unit of the Ministry of economy and Planning has indicated that the project will be viable only if it is set up for the subregion market. Therefore it would be necessary to undertake a full subregional market study and a comparative study of other similar production units in the subregion. The outcome of these analyses are to be submitted to other countries of the subregion to enable them decide jointly on a possible optimal location.		

PROJECT PROFILE NO. 14

DATE OF PROPOSAL: 1988 LAST UPDATE: 1991 SUBSECTOR: Metallurgical industry (iron and steel)

1. Project Title: Establishment of integrated iron and steel mill (Madagascar)

2. Objective: To establish a new enterprise to manufacture metallurgical products.

3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
3. Government of Madagascar.	5. Feasibility study available.	9. Physical infrastructure
4. Moramanga, Madagascar.	6. Financing to be arranged.	7. Iron ore deposits available 15 km from project site.
		8. Electricity (14MW in first year, 71MW in second year and 69MW in third year) available in project area.
		9. Complete factory to be set up, as well as infrastruc- ture for mining the iron ore and transporting iron to project site.
10. Projected demand by product	12. Capacity by product	14. Additional information including collaboration arrangements already made and type of participation sought by Member States
11. Market	13. Total investment	
10. Not available.	12. 70,000 tons metallurgical products.	14. Government seeks private investor interested in developing the project.
11. Market study made.	13. FF671.5 million.	
15. <u>Remarks:</u>	Decision on the viability of this potential multinational project can be taken only after completion of the ongoing geological survey.	

PROJECT PROFILE NO. 15

DATE OF PROPOSAL: 1988 LAST UPDATE: 1991 SUBSECTOR: Metallurgical industry (iron and steel)

1. Project Title: Establishment of a steel re-rolling mill (Zambia)

2. Objective: To manufacture wire rods, channels angles, square, flat and round reinforcing bars.

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

3. INDECO.	5. Feasibility study completed. Promoter looking for sources of finance.	7. Iron ore: 350 metric tons p.a.; ferro silicone: 120 metric tons p.a.; ferro manganese: 245 metric tons p.a.; metal scrap.
4. Lusaka, Zambia.	6. PTA, UNIDO and ADB to assist in securing finance.	8. Available.
		9. Complete plant to be set up.

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. 120,000 metric tons by 1990. 165,000 metric tons by 1995.	12. Initially 30,000 tons billets p.a. After expansion, 60,000 tons p.a.	14. Project already submitted to ADB for financing and supply/purchase arrangements will be negotiated with ZISCOSTEEL.
11. Local.	13. \$40 million.	

15. Remarks:

Project being actively pursued: joint venture partner identified; financing still being sought; project manager appointed; site being prepared.

Project MET/02, "Product rationalization and upgrading in iron and steel plants/rolling mills in the PTA subregion" of the IIDP also intends to review the likely impact of this project.

PROJECT PROFILE NO. 16

DATE OF PROPOSAL: 1988 LAST UPDATE: 1991 SUBSECTOR: Metallurgical industry (iron and steel)

1. Project Title: Establishment of multinational sponge iron plants in PTA countries (Mozambique/Tanzania/Uganda/Zambia)

2. Objective: To augment and supplement the production of iron and steel, presently based on metal scrap, in the subregion.

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

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| 3. PTA secretariat. | 5. Through UNIDO technical assistance project (RP/RAF/85/611), a survey of the iron and steel industry of the PTA and SADCC countries was carried out. This study also included supply and demand projections up to the year 1995 and beyond. Together with the assistance of the Commonwealth Secretariat, UNIDO assisted PTA in conducting an in-depth assessment of small steel plants/rolling mills/re-rolling mills in the subregion. | 7. The PTA subregion is well-endowed with mineral resources such as iron ore, coal, chrome ore, nickel, cobalt, titanium, copper and refractory materials/fluxing minerals such as silica, magnesite, limestone, fluospor, etc. The coal resources of the subregion is estimated at approximately 54,604 million tons with Zimbabwe accounting for the largest share, followed by Botswana and Mozambique. Large deposits of iron ore are to be found in several countries, notably Angola, Madagascar, Mozambique, Zambia and Zimbabwe. |
| 4. Mozambique, Tanzania, Uganda and Zambia. | 6. As a result of these studies, PTA initiated supply/purchase arrangements for ZISCOSTEEL billets with various national steel plants. Ethiopia, Kenya, Mauritius, Uganda and Zambia now obtain their feedstock from Zimbabwe. However, in order to meet fully the requirements of the subregion, it is considered desirable to promote the development of sponge-iron production in the subregion. | 8. Varies according to project.
9. Varies according to project. |

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. By 1995: 3.13 million tons per year.	12. Varies according to project.	14. The UNIDO survey estimated the iron and steel demand for the subregion would, at best, amount to about 3.13 million tons per year by the year 1995, while the total consumption of iron and steel in the subregion amounted to only 1.2 million tons per year during the period 1981-1983. Moreover, very little commercial exploitation of some of these resources is carried out and the processing of iron ore in particular is at an elementary stage. Prospects for the development of sponge iron are particularly favourable in Mozambique, Tanzania, Uganda and Zambia. Zambia has already taken concrete action in this direction and formulated a project for possible implementation with a major donor country.
11. Subregional.	13. Varies according to project.	

15. Remarks: Project included in Integrated Industrial Development Programme as MET/04, "Development of a programme for the production of sponge iron in the PTA subregion". The outputs of that project would be a set of feasibility studies covering production possibilities in the different locations.

PROJECT PROFILE NO. 17

DATE OF PROPOSAL: 1988 LAST UPDATE: 1988 SUBSECTOR: Engineering industry (road transport)

1. Project Title: Manufacture of low-cost vehicles (Ethiopia)

2. Objective: To produce bicycles, motorcycles, side-cars, three-wheelers, and animal drawn carts suitable for rural areas to meet local and subregional demand.

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

3. Ministry of Industry, Ethiopia.	5. Feasibility study available (by I.P.S. national consultants, in association with I.T. Transport of UK, January 1986).	7. 50 per cent local; 50 per cent imported.
4. Addis Ababa, Ethiopia.	6. UNIDO assistance sought for market study for bicycles, motorcycles and three-wheelers in the subregion, for which terms of reference are available.	8. Electricity (available).
		9. Building of 10,000m ² . required.

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. Local demand: Bicycles: 9,500 p.a. Bicycle trailers: 500 p.a. Motorcycles: 4,000 p.a. Three-wheelers: 800 p.a. Side-cars: 500 p.a. Horse carts: 900 p.a. Rural carts: 2,100 p.a.	12. Bicycles: 17,500 p.a. Bicycle trailers: 500 p.a. Motorcycles: 14,000 p.a. Three-wheelers: 1,200 p.a. Side-cars: 500 p.a. Horse carts: 400 p.a. Rural carts: 2,100 p.a.	14. 1) Negotiations underway with Government of China for collaboration in financing and know-how. 2) The first phase of project is manufacture of bicycles and three-wheelers. Designs for other low-cost vehicles will be prepared by the factory, and metal production would be left to local artisans.
11. Primarily domestic, but exports (mainly bicycles and motorcycles) to countries in the subregion would make it economic to manufacture more parts locally.	13. \$10 million.	

PROJECT PROFILE NO. 18

DATE OF PROPOSAL: 1988 LAST UPDATE: 1988 SUBSECTOR: Engineering industry (machine tools and allied machinery)

1. Project Title: Spare parts and engineering hand tools factory (Ethiopia)

2. Objective: To manufacture various types of cast, machined and forged industrial spare parts, engineering hand tools and stainless steel cutlery.

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

3. Ministry of Industry, Ethiopia.	5. Commissioning to be completed in first quarter of 1989.	7. Local scrap and other imported iron and steel. Basic products, chemicals, etc.
4. Akaki, Ethiopia (20 km from Addis Ababa).	6. UNIDO assistance required for market study for factory products in the subregion. Upgrading of training centre.	8. Electricity and gas available locally.
		9. Development area: 250,000m ² . Covered area: 30,000m ² .

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. Local demand (present) Spare parts: 2,000 tons p.a. Engineering hand tools: the 180,000 pieces p.a. Cutlery: 200,000 pieces p.a.	12. Industrial spare parts: 4,500 tons p.a. Engineering hand tools: 500,000 pieces p.a. Cutlery: 2,000,000 pieces p.a.	14. Know-how assistance in the operational management of plant needed. Inputs in form of sponge iron, pig iron, steel rods and bars needed.
11. Primarily domestic, but export would greatly improve utilization of available capacity.	13. \$86 million.	

PROJECT PROFILE NO. 19

DATE OF PROPOSAL: 1988 LAST UPDATE: 1988 SUBSECTOR: Engineering industry (agricultural machinery and equipment)

1. Project Title: Water pump factory (Ethiopia)

2. Objective: To produce centrifugal pumps (2-8 inches) and hand pumps for irrigation, water supply and construction applications.

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

3. Ministry of Industry, Ethiopia.	5. Project already completed and production started 1987.	7. Local scrap, imported pig iron, steel bars and rods and chemicals.
4. Akaki, Ethiopia (20 km from Addis Ababa).	6. Assistance in surveying subregional market and promoting plant products.	8. Electricity available.
		9. Compound area: 20,000 m ² . Built-up area: 10,000 m ² .

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. 500 centrifugal pumps and 2,000 hand pumps.	12. 1,500 centrifugal pumps/year and 3,300 hand pumps/year.	14. Plan to expand plant to produce 24-inch section diameter pumps already completed, but implementation suspended at present.
11. Initially estimated domestic demand was not realistic.	13. \$8 million.	

PROJECT PROFILE NO. 20

DATE OF PROPOSAL: 1988 LAST UPDATE: 1988 SUBSECTOR: Engineering industry (machine tools and allied machinery)

1. Project Title: Machine-tool factory (Ethiopia)
2. Objective: To produce various types of universal machine tools and small presses.

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|--|---|--|
| 3. Promoter/
sponsor | 5. Project
status | 7. Raw materials |
| 4. Location | 6. Immediate
follow-up | 8. Energy |
| 3. Ministry of
Industry,
Ethiopia. | 5. Feasibility study
completed.
Negotiations with
Italian suppliers
under way as project
is to be financed
by Italian Government
Credit. | 7. About 70 per cent locally
made, 30 per cent
imported machine parts
and components. |
| 4. Akaki,
Ethiopia. | 6. Survey of subregional
market and promotion
of products required. | 8. Electricity available.
9. Built-up area: 10,000m ² . |
| 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. About 200 pieces per
year of lathes, milling
machinery and drilling
machinery as well as
35 pieces per year of
small presses. | 12. 350 units lathes,
milling and drilling
machinery.
60 units small
presses (40-120 tons). | 14. If going into subregional
market proves successful,
plant shall be expanded
in terms of both
quantity and type of
machine tools. Need is
recognized for close
co-ordination and
effective project
harmonization through such
organizations as PTA,
SADCC and UNIDO, with
related projects in
Tanzania and Zimbabwe. |
| 11. Initially, oriented towards
domestic demand. But
initial market penetration
rate could be lower than
anticipated, and excess
capacity available for
export to the subregion. | 13. \$24 million. | |

PROJECT PROFILE NO. 21

DATE OF PROPOSAL: 1988 LAST UPDATE: 1988 SUBSECTOR: Engineering industry (agricultural machinery and equipment)

1. Project Title: Tractor- and animal-drawn farm implements factory (Ethiopia)

2. Objective: To produce tractor-drawn farm implements such as disc ploughs and harrows, as well as animal-drawn implements such as mouldboard ploughs and planters.

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

3. Ministry of Industry.	5. Project detail design almost completed.	7. Imported plates, sheets and long products.
4. Nagreth, Electricity and gas Ethiopia.	6. Assistance in surveying subregional market required.	8. locally available.
		9. Compound area: 250,000m ² . Built-up area: 30,000m ² .

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. About 2,000 tons of nine types of tractor-drawn implements and 1,000 tons of 14 types of animal-drawn implements per year.	12. Annual capacity working two shifts: 6,000 tons of animal- and tractor-drawn farm implements.	14. Since major efforts will be required, especially in the initial year, to promote domestic market exports to neighbouring countries will contribute greatly to economic operation of plant.
11. Initially oriented to domestic market, with possibility of export to neighbouring countries.	13. \$35 million.	

PROJECT PROFILE NO. 22

DATE OF PROPOSAL: 1988 LAST UPDATE: 1988 SUBSECTOR: Engineering industry (road transport)

1. Project Title: Truck-trailer and bodies factory (Ethiopia)

2. Objective: To manufacture locally truck bodies as well as animal- and semi-trailers for both solid and liquid cargoes.

3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
3. Ministry of Industry/ Calabrene of Italy.	5. Project feasibility study completed and approved for implementation. Negotiations on joint venture contract with foreign partner currently under way.	7. Steel plates and sheets as well as long products - hollow and solid, mostly imported.
4. Addis Ababa, Ethiopia.	6. Assistance in surveying subregional market for products required.	8. Electricity available.
		9. Compound area: 30,000m ² . Built-up area: 10,000m ² .
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. Agro-trailers: 341. Truck-trailers and semi-trailers: 720. Truck bodies and chassis: 1,308. Tankers: 98. Tippers: 348.	12. Same as indicated in 10 above.	14. Products envisaged to be more competitive as against imports from outside Africa because of possible advantages through lower transport costs.
11. Initially oriented towards the domestic market, but excess capacity during early years of market penetration and additional shift capacities could serve subregional market.		

PROJECT PROFILE NO. 23

DATE OF PROPOSAL: 1988 LAST UPDATE: 1988 SUBSECTOR: Engineering industry (machine tools and allied equipment)

1. Project Title: Multi-purpose engineering workshop (Ethiopia)

2. Objective: To manufacture simple fabricated metal goods (vessels, conveyors, concrete mixers, boilers, etc.) needed for storage, material handling transport and processing, and to build up engineering capability.

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

3. Ministry of Industry, Ethiopia.	5. Project feasibility study completed and approved for implementation.	7. Imported steel sheets and bars, prime movers, locally cast components.
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4. Akaki, Electricity locally Ethiopia.	5. Negotiation for project design contract with foreign partner currently under way.	8. ? available.
	6. Assistance in subregional market survey for plant products required.	9. Compound area: 20,000m ² . Built-up area: 10,000m ² 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. About 2,000 tons of vessels material handling equipment, boilers, heat exchangers, etc.	12. Capacity per year per shift: about 3,500 tons comprising boilers, heat exchangers, column mixers and agitators, vessels and material handling equipment.	14. Products envisaged to be more competitive in the subregion, as against imports from Europe or Far East, because of possible advantages through lower transport costs.
11. Primarily oriented towards domestic market, but extension to subregional market possible.	13. \$35 million, of which about 23 million in foreign currency.	

PROJECT PROFILE NO. 24

DATE OF PROPOSAL: 1988 LAST UPDATE: 1988 SUBSECTOR: Chemical industry (basic chemicals)

1. Project Title: Establishment of a salt refining and packaging plant (Somalia)

2. Objective: To enhance export earnings.

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

3. Government of Somalia.	5. Pre-feasibility study completed in 1981.	7. Available locally in abundance.
4. Hurdio- Hafun, Somalia.	6. Updating of study.	8. Group of diesel engines with 350HP total capacity.
		9. Infrastructure not 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. 80,000 tons (domestic).	12. 3.8 million tons/year.	14. The pre-feasibility study concludes that the project was technically feasible and economically viable. Total investment figure includes interest during the period of construction, infrastructure costs and operating capital. Government is looking for equity participation, know-how and technology.
11. Export-oriented.	13. \$140 million.	

PROJECT PROFILE NO. 25

DATE OF PROPOSAL: 1988 LAST UPDATE: 1988 SUBSECTOR: Chemical industry (basic chemicals)

1. Project Title: Expansion of Berbera gypsum factory (Somalia)
2. Objective: To help import substitution and exploit natural resources.
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- | | | |
|-------------------------|---------------------------|----------------------------|
| 3. Promoter/
sponsor | 5. Project
status | 7. Raw materials |
| 4. Location | 6. Immediate
follow-up | 8. Energy |
| | | 9. Physical infrastructure |
-
- | | | |
|------------------------------|--|--|
| 3. Government
of Somalia. | 5. Factory
operational. | 7. 7 million tons of high-grade gypsum and anhydrite reserves, one of the largest deposits in the world. |
| 4. Berbera,
Somalia. | 6. Feasibility and market
studies needed. | 8. Factory obtains electricity from nearby cement factory. |
| | | 9. A newly established factory with all infrastructure. |
-
- | | | |
|---------------------------------------|----------------------------|--|
| 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. Not known. | 12. 1,620 tons of
calcined gypsum a
year. | 14. Government seeks technical
expertise for product
development and access to
foreign markets. |
| 11. No information
available, but
domestically oriented. | 13. No information
available. | |

PROJECT PROFILE NO. 26

DATE OF PROPOSAL: 1988 LAST UPDATE: 1988 SUBSECTOR: Chemical industry (fertilizers)

1. Project Title: Rehabilitation of urea fertilizer plant (Somalia)

2. Objective: To increase agricultural production.

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

3. Government of Somalia.	5. Pre-feasibility.	7. Plant depends on nearby petroleum refinery for raw material.
4. Mogadishu, Somalia.	6. Investigation of technical problems.	8. 6MW supplied by factory, an additional 3.2MW needed.
		9. Factory with all necessary equipment available; easily accessible.

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. Domestic, 15,000 tons p.a.	12. 50,000 tons p.a.	14. Initial investment in the plant was \$70 million. Factory has some technical problems. Participation sought in trouble-shooting, loan, know-how and management. Factory established in 1983, but has been operating at low level (1,405 tons in 1984, 1,953 tons in 1985 and 840 tons in 1986). Factory closed since 1986.
11. 35,000 tons of urea to be exported annually.	13. \$16 million.	

PROJECT PROFILE NO. 27

DATE OF PROPOSAL: 1988 LAST UPDATE: 1991 SUBSECTOR: Chemical industry (ancillary products)

1. Project Title: Manufacture of carbon black (Kenya)

2. Objective: To establish a new plant to produce carbon black, an essential raw material for the manufacture of tyres and printing ink.

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

3. Ministry of Industry, Kenya.	5. Feasibility study carried out in 1987.	7. Light and heavy crude oil from refinery at Mombasa.
4. Mombasa, Kenya.	6. Market study needs to be carried out.	8. Information not available.
		9. Information not available.

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

10. Information not available.	12. 20,000 tons p.a. (minimum economic size).	14. Government looking for a private promoter.
11. Local: 8,000 tons p.a. Export: 12,000 tons p.a.	13. \$5 million.	

15. Remarks: Project is still considered an interesting possibility, both for import substitution and exports within PTA subregion, where carbon black is not yet produced. Nevertheless, a feasibility study still needs to be made.

PROJECT PROFILE NO. 28

DATE OF PROPOSAL: 1988 LAST UPDATE: 1988 SUBSECTOR: Chemical industry (ancillary products)

1. Project Title: Hollow glass manufacturing plant (Somalia)

2. Objective: To encourage import-substitution and give impetus to cottage-level producers.

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

3. Government of Somalia.	5. Pre-feasibility.	7. Silica sand available locally.
4. Mogadishu, Somalia.	6. Further study to confirm market demand and analyze profitability.	8. No available information.
		9. A tarmac road links the proposed factory site to the raw material deposits.

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. 3,210-5,712 tons p.a. (1990).	12. 3,000-4,500 tons p.a. (minimum economic size).	14. Equity participation and know-how sought.
11. Oriented towards domestic market.	13. \$8.1 million.	

PROJECT PROFILE NO. 29

DATE OF PROPOSAL: 1988 LAST UPDATE: 1991 SUBSECTOR: Chemical industry (pesticides)

1. Project Title: Rehabilitation of copper oxychloride plant (Zambia)

2. Objective: To expand production of copper oxychloride.

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

3. Marana Chemicals Ltd.	5. Feasibility study for the rehabilitation under preparation.	7. Copper wires/scraps, hydrochloric acid, fuel oil. estim. 51 per cent local, 49 per cent imported
4. Ndola, Zambia.	6. Completion of feasibility study and promotion among potential investors and financing institutions.	8. Hydroelectricity available.
		9. Available

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

10. To be determined in the feasibility study.	12. 3000 mt p.a.	14. N/A
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11. When producing at 100% of capacity (3000mt p.a.), estimated sales 30% domestic and 70% exports	13. Estim. US\$779,000 of which US\$710,000 foreign currency component	
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15. Remarks:

Updated project profile 1991.

PROJECT PROFILE NO. 30

DATE OF PROPOSAL: 1988 LAST UPDATE: 1988 SUBSECTOR: Chemical industry (pesticides)

1. Project Title: Rehabilitation of copper oxychloride plant (Zimbabwe)
2. Objective: To contribute to production of pesticides, thus reducing pre-harvest crop losses and increasing food output.

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- | | | |
|-------------------------|---------------------------|----------------------------|
| 3. Promoter/
sponsor | 5. Project
status | 7. Raw materials |
| 4. Location | 6. Immediate
follow-up | 8. Energy |
| | | 9. Physical infrastructure |
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- | | | |
|-------------------------------|---|---|
| 3. Government of
Zimbabwe. | 5. Feasibility study for
rehabilitation and
expansion of existing
plant under
preparation. | 7. Copper wires/scraps,
hydrochloric acid, fuel oil. |
| 4. Zimbabwe. | 6. Completion of
feasibility study and
promotion among
potential investors
and financing
institutions. | 8. Coal-generated power
available. |
| | | 9. Already established. |
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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. Local demand by 1990:
more than 2,000 tons
a year.
Other countries in
the subregion: 500 tons. | 12. 3,000 tons.
13. To be determined
in feasibility
study. | 14. Commonwealth Secretariat
carrying out feasibility
study and supply/purchase
arrangements to be worked
out with neighbouring
countries. |
| 11. Domestic and
subregional. | | |

PROJECT PROFILE NO. 31

DATE OF PROPOSAL: 1988 LAST UPDATE: 1988 SUBSECTOR: Chemical industry (basic chemicals)

1. Project Title: Integrated chlor-alkali and PVC plant (Zimbabwe)
2. Objective: Manufacture of chlor-alkali products (NaOH, Cl₂, HCl, NaOCl) and PVC resins for both the domestic and subregional markets.
-
- | | | |
|--|---|---|
| 3. Promoter/
sponsor | 5. Project
status | 7. Raw materials |
| 4. Location | 6. Immediate
follow-up | 8. Energy |
| 3. Industrial
Development
Corporation
of Zimbabwe
Ltd (IDC). | 5. Requests for
technical offers. | 7. Salt imported from the
subregion; calcium carbide
to be manufactured in
Zimbabwe; process water
made available locally;
sodium carbonate imported
from the subregion; and
process chemicals imported. |
| 4. Plumtree,
Zimbabwe. | 6. Final investment
appraisal and
requests for
final offers. | |
| 8. Electricity from the national grid (ZESA) at 11Kv. There is to be a centrally located medium-voltage sub-station and a transformer-rectifier for the chlorine/caustic soda unit. | | |
| 9. The complex is to be located close to a source of raw water and fuel. The scope of off-sites and utilities is to include: electrical power sub-station; water supply and treatment; storage facilities and workshops; effluent treatment and disposal units; fire station; laboratories; medical centre and other personnel facilities. | | |
| 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. PVC: 15,000 tons p.a.
Caustic soda: 13,000
tons p.a.
Chlorine: 1,000 tons p.a.
Hydrochloric acid:
3,000 tons p.a. | 12. Acetylene: 8,686 tons
Chlorine: 13,563 tons
Caustic soda: 15,198 tons
Hydrogen chloride:
12,322 tons
VCM: 20,200 tons
PVC: 20,000 tons. | 14. Project expected to be a
joint venture between IDC
and Zimbabwe private sector
companies. Issues of
participation by Member
States not yet decided.
Total manpower requirement
for the project is 362, of
whom 75 engineering and
technical staff. |
| 11. Domestic and
subregional markets. | 13. Z\$235 million
(\$125 million). | |

PROJECT PROFILE NO. 32

DATE OF PROPOSAL: 1988 LAST UPDATE: 1988 SUBSECTOR: Chemical industry (basic chemicals)

1. Project Title: Chrome tanning salts (Zimbabwe)
2. Objective: Manufacture of sodium dichromate solution (leather tanning salt) for the domestic and subregional markets.
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- | | | |
|--|---|--|
| 3. Promoter/
sponsor | 5. Project
status | 7. Raw materials |
| 4. Location | 6. Immediate
follow-up | 8. Energy |
| 3. Industrial
Development
Corporation
of Zimbabwe
Ltd (IDC). | 5. UNIDO team of experts
to carry out final
techno-economic
feasibility study. | 7. Chromite and limestone
available in Zimbabwe;
soda ash imported from the
subregion; sulphuric acid
available in Zimbabwe. |
| 4. Shurugwi,
Midlands. | 6. Final investment
appraisal. | 8. Electrical power from the
national grid (ZESA). |
| | | 9. Off-sites and utilities to
be close to supply of main
raw material (chromite ore). |
-
- | | | |
|---------------------------------------|----------------------------|--|
| 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. Tons p.a. by 1990:
Zimbabwe: 960
Botswana: 400
Zambia: 100
Malawi: 100
Other SADCC
countries: <u>100</u>
1,660 | 12. 2,000 tons p.a.
sodium dichromate. | 14. Interested parties so far
are the Industrial
Development Corporation of
Zimbabwe (IDC), the
Botswana Development
Corporation, Rio Tinto,
Ciba, Bata Shoe Company,
Imponente Tanning and
Belmont Leather. Apart
from Botswana, participation
by subregional Member States
not yet considered.
Total manpower requirement
is expected to be in the
region of 35. |
| 11. Domestic and
subregional markets. | 13. Z\$12 million
(\$6.3 million). | |

PROJECT PROFILE NO. 33

DATE OF PROPOSAL: 1988 LAST UPDATE: 1988 SUBSECTOR: Chemical industry (basic chemicals)

1. Project Title: Production of caustic soda (Tanzania)
2. Objective: To ensure regular supply of basic chemicals urgently needed in priority industries, such as soap and detergents, textile and pulp and paper processing.

3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
3. National Chemicals Industries, Dar-es-Salaam, Tanzania.	5. Pre-feasibility study conducted by promoters.	7. Soda ash: at first from Lake Magadi, and later on from Lake Natron. Lime: from limestone quarried in coastal areas.
4. Arusha, Tanzania.	6. Feasibility study to be undertaken by future partner, covering such areas as: (i) Techno-economic feasibility study; (ii) demand analysis and pricing; (iii) technical aspects; (iv) raw materials; (v) manpower and training requirements; (vi) utilities and essential services; (vii) financial and economic analysis; and (viii) schedule of implementation.	8. Readily available from Tanzania Electrical Supplies Company. 9. Provisional site selected in industrial area at Arusha, well served with essential facilities such as water and passable roads.

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. Local demand is estimated at 25,000- 30,000 metric tons p.a. Regional demand is estimated to be 50,000- 60,000 metric tons p.a.	12. 25-30,000 tons of caustic soda per annum. 13. To be determined in the feasibility study.	14. The project requires a feasibility study by a partner who could actively participate in its preparation, provide technical know-how, supply machinery and possibly take share of the equity. Loan will be sought from such institutions as the EADB. Training in general will also be required.
11. Upon expanding the plant at a later stage, it is expected that the products will sell in Burundi, Kenya, Rwanda, Uganda and Zambia.		

PROJECT PROFILE NO. 35

DATE OF PROPOSAL: 1988 LAST UPDATE: 1988 SUBSECTOR: Chemical industry
(non-metallic mineral products)

1. Project Title: Mbagala sheet glass project (Tanzania)

2. Objective: To promote the local production of sheet glass and serve both local and subregional markets.

3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
3. Tanzania Saruji Corporation, through its subsidiary company MbagalaSheet Glass Ltd, Dar-es-Salaam, Tanzania.	5. Rehabilitation required prior to final commissioning.	7. Silica sand: locally available some 15km from project site.
4. Dar-es-Salaam, (15km south of city centre) Tanzania.	6. Mobilization of all local costs amounting to \$1 million. Provision of infrastructure including water, electricity and manpower. Mobilization of foreign currency for rehabilitation. Rehabilitation and infrastructural improvements require \$2 million (DM4 million), while initial raw materials and working capital call for an additional \$500,000. (Total cost of rehabilitating the plant amounts to \$2.5 million).	Dolomite: locally available some 160km from project site. Limestone: locally available 400km from project site. Soda ash: imported from Kenya. Salt cake: imported from Europe. Alumina: imported from Europe.
		8. Available.
		9. A 15km tarmac road in need of repair connects the plant to Dar-es-Salaam harbour and railway station. Water supply from city centre is inadequate. Telecommunication networks available.

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

10. Local demand is about 4-5,000 tons p.a., while exports are expected to reach 10,000 tons p.a.

12. Installed capacity: 15,000 tons of sheet glass p.a.

13. \$20,000,000.

11. Potential markets include Uganda, Zambia, Kenya, Madagascar, Rwanda and Burundi. The first three have rail links with Tanzania and enjoy traditional trading ties.

14. Tanzania Saruji Corporation awarded a turnkey contract to Basse Sambre Eri of Belgium in 1979 to construct the plant. Development Consultants International of India were the overall consultants. Physical implementation of the project started in May 1981, and was completed in 1984. Additional facilities for the treatment of raw materials, particularly sand beneficiation, were completed in July 1985 and commercial production was expected to start immediately. However, owing to power supply problems, the plant could not be commissioned. Adequate electricity was only made available in April 1987. After lying idle for so long, some of the machinery and equipment, particularly the electronic equipment, as well as the furnace were inoperable making it necessary to rehabilitate the plant before commissioning it. The Belgian Government, which financed the original loan, was unable to fund the essential rehabilitation and commissioning of the plant which a contractor is willing to undertake. The Tanzanian Government has decided to proceed with plant rehabilitation, and is soliciting funds from elsewhere as well as drawing on its own resources. The Tanzania Industrial Studies and Consulting Organization (TISCO) have been hired as project consultants, and their study on rehabilitation needs shows a total foreign component requirement of DM900,000 (about \$450,000).

PROJECT PROFILE NO. 38

DATE OF PROPOSAL: 1988 LAST UPDATE: 1991 SUBSECTOR: Agro- and agro-related industries (food processing)

1. Project Title: Edible oil production (Lesotho)

2. Objective: Production of edible oil from locally produced sunflower.

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

3. Lesotho National Development Corporation (LNDC), Elangeni Oil and Cake Mills, and Chesterland Holdings Inc. (UK).	5. Construction of factory building on-going; production scheduled for January/February 1989.	7. Sunflower seed: 14,000 tons p.a. Source: Lesotho. Chemicals: to be determined.
4. Maseru, Lesotho.	6. Not applicable at present, but product range will be extended.	8. Electricity and water adequate.
		9. Well developed road and air facilities. Lesotho linked to RSA road and rail network. Local companies provide international road haulage services.

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. 300,000 tons p.a. (PTA).	12. 4,000 tons in year one, building up to 8,000 by year four.	14. By-products will include oil cake (high protein animal feed), sunflower husks which can be used for stoking steam engines. Product extensions will include margarine, soap detergents, industrial oils and textured vegetable protein. The domestic and subregional demand for edible vegetable oils is appreciable, with a large proportion of the market still being supplied by sources outside the subregion.
11. SADCC, Zaire, India and PTA.	13. M(Maloti)6,940,000.	

15. Remarks: There is a large demand for edible oil in Lesotho and generally in the PTA subregion. It could be produced locally from sunflowers which could be grown in Lesotho. The establishment of the edible oil mill is currently under active consideration, with an expected investment of US\$7.5 million. The foreign contribution is sought in terms of an investment equity loan.

PROJECT PROFILE NO. 39

DATE OF PROPOSAL: 1988 LAST UPDATE: 1991 SUBSECTOR: Agro- and agro-related industries (food processing)

1. Project Title: Coconut processing programme (Comoros)

2. Objective: Production of coconut oil for food purposes.

3. Promoter/ sponsor	5. Project status	7. Raw materials
4. Location	6. Immediate follow-up	8. Energy
3. Government of the Comoros.	5. Conceptual stage.	7. Locally grown coconuts.
4. Comoros.	6. Feasibility study being commissioned.	8. Requirements to be determined in feasibility study.
		9. Requirements to be determined in feasibility study.
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. Requirements to be determined in feasibility study.	12. Requirements to be determined in feasibility study.	14. The programme comprises four sub-projects: (a) production of coconut oil for human consumption; (b) manufacture of coir mattresses and mats; (c) use of coconut husks for the manufacture of furniture; and (d) possible extraction of alcohol and sun-tan oil for export.
11. Requirements to be determined in feasibility study.	13. Requirements to be determined in feasibility study.	
15. Remarks: From discussions held during preparatory missions it has emerged that the project should focus on (i) edible oil; (ii) coir mattresses and mats; (iii) soap. For each of these products local promoters have been identified and potential partners are sought in the subregion. The overall project is also related to the establishment of a Franch/Seychelles pilot plant to produce coconut cream as an input for cosmetic and food products. The project may also include the use of coconut trees in the construction sector and should be revised to enhance the potential for subregional co-operation.		

PROJECT PROFILE NO. 40

DATE OF PROPOSAL: 1988 LAST UPDATE: 1991 SUBSECTOR: Agro- and agro-related industries (food-processing)

1. Project Title: Fish-processing facilities (Uganda)

2. Objective: Production of fish fillets and by-products.

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

3. Government of Uganda	5. Agreement reached between Italian/ Chinese Governments and Uganda Government on provision of technical and financial assistance	7. Fish from Lake Victoria and other lakes
4. Jinja/Entebbe, Uganda		8. From national grid
	6. Market survey in the subregion with a view to reaching purchase/ supply agreement	9. Available

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

10. To be determined.	12. To be provided later	14. N/A
11. PTA subregion and other island countries.	13. To be provided later	

15. Remarks: Production started in 1990. Currently selling to domestic market and exporting to Europe.

PROJECT PROFILE NO. 41

Date of proposal: 1991 Last update: 1991 Subsector: Metallurgical

1. **Project title:** Production of galvanized steel wire and light structural products (Lesotho)
2. **Objective:** To provide local inputs for engineering construction and components for distribution and electric power transmission lines
3. **Status of implementation:** under discussion
4. **Partner/sponsor/institution:** to be determined
5. **Location:** Lesotho
6. **Estimated cost:** N/A
7. **Estimated duration:** N/A
8. **Action required/recommendations:** to be determined
9. **Project description and additional information:**

This project is related to and may replace the PTA project ENG/04. It is included in the draft Lesotho National programme for the second IDDA. Light structurals can be manufactured from billets in small rolling mills with facilities for coal-fired heating furnaces. Light structurals such as rods, angles, flats, and tees can be used for various structural requirements in reinforcement, fabrication, window grills, security fencing and for various types of engineering and construction works. The greatest demand is for light galvanized structurals used for the construction of electric poles and pylons for electric power distribution and transmission lines. Another line of production uses rods as inputs to draw wires, from which a variety of wire products (galvanized and black) can be made, including welded mesh, and various construction and fencing requirements. If a galvanizing complex with modern technology is set up, it should be possible to add the manufacture of sheet products, both plain and corrugated, at a later stage. As a subregional component of the project, there is a large market for all these products in RSA and in the PTA countries.

PROJECT PROFILE NO. 42

Date of proposal: 1991 Last update: 1991 Subsector: Engineering

1. **Project title:** Establishment of a joint-venture for bicycle assembly (Swaziland/Mozambique)
2. **Objective:** To integrate regionally the present production of bicycles and possibly to produce other cheap forms of rural transport
3. **Status of implementation:** Negotiation stage
4. **Partner/sponsor/institution:** Mozambican bicycle producer and Swaziland private companies
5. **Location:** Mozambique/Swaziland
6. **Estimated cost:** N/A
7. **Estimated duration:** N/A
8. **Action required/recommendations:** to be determined
9. **Project description and additional information:**

The existing enterprise, based in Mozambique, works at only 10 per cent of its capacity due mainly to the limited size of the domestic market. A recent agreement has been signed for after-sales services and negotiations are under way for establishing a joint-venture. The EEC Centre for Industrial Development (CDI) is expected to finance and support the feasibility study for the joint-venture.

P R O J E C T P R O F I L E N O. 43

Date of proposal: 1991 **Last update:** 1991 **Subsector:** Engineering

1. **Project title:** Expansion of existing production of pumps for irrigation and rural water supply (Swaziland/Zimbabwe)

2. **Objective:** To expand existing local production of agricultural equipment in the subregion

3. **Status of implementation:** Commercial collaboration already in place

4. **Partner/sponsor/institution:** Private enterprises in Swaziland and Zimbabwe

5. **Location:** Swaziland and Zimbabwe

6. **Estimated cost:** N/A

7. **Estimated duration:** N/A

8. **Action required/recommendations:** to be determined

9. **Project description and additional information:**

Swaziland and Zimbabwean producers have established commercial collaboration. Further co-operation in the areas of production and maintenance and operation is envisaged.

PROJECT PROFILE NO. 44

Date of proposal: 1991 Last update: 1991 Subsector: Chemical

1. Project title: Expansion of Lesotho Pharmaceutical factory
2. Objective: To expand existing capacity and diversify production of the Lesotho Pharmaceutical factory to supply the PTA market.
3. Status of implementation: Under discussion
4. Partner/sponsor/institution: Lesotho/PTA
5. Location: Lesotho
6. Estimated cost: N.A.
7. Estimated duration: N.A.
8. Action required/recommendations:
To asses PTA demand for pharmaceuticals and existing PTA standards for pharmaceutical products.
9. Project description and additional information:
Lesotho already has one pharmaceutical plant. Production could be diversified and the plant could be expanded so as to export to PTA countries, provided that a PTA policy is agreed on rationalization and harmonization of standards etc.

PROJECT PROFILE NO. 47

Date of proposal: 1991 Last update: 1991 Subsector: Agro- and agro-based

1. Project title: Meat processing joint-venture
2. Objective: To integrate meat processing industries in Eastern and Southern African countries
3. Status of implementation: under discussion
4. Partner/sponsor/institution: Botswana Meat Commission (BMC) and other similar bodies in other Eastern and Southern African countries
5. Location: SADCC countries
6. Estimated cost: N.A.
7. Estimated duration: N.A.
8. Action required/recommendations:

To undertake a survey at the subregional level to identify the potential for co-operation and integration of meat-processing and other by-products following an integrated approach

9. Project description and additional information:

To assess existing production capabilities and facilities and co-operation potential for meat-processing, canning, and processing other products such as raw hides, wet blue hides, bone and blood meal, tallow, animal vaccines, disease control, etc.

An interesting opportunity for regional co-operation would be the creation of subsidiaries and/or related joint-ventures in other SADCC/PTA countries, based on Botswana Meat Commission (BMC) expertise, finance, market and quality control know-how.

PROJECT PROFILE NO. 49

Date of proposal: 1991 Last update: 1991 Subsector: Agro- and agro-based

1. Project title: Establishment of an integrated textile complex (Lesotho)
2. Objective: To establish a modern integrated textile industry in Lesotho to take advantage of its market preferences and raw materials.
3. Status of implementation: under discussion
4. Partner/sponsor/institution: N/A
5. Location: Lesotho
6. Estimated cost: N/A
7. Estimated duration: N/A
8. Action required/recommendations: Pre-feasibility study
9. Project description and additional information:

This project replaces project no. 27 of the IDDA Revised Integrated Industrial Promotion Programme of 1988: Cotton weaving plant.

The country's comparative advantages were identified as transport, availability of foreign exchange and no quota restrictions for Lesotho on exports of textiles to EC, USA and Canada. Wool and mohair are available in the country, while cotton, polyester, viscose, and other raw materials are available in RSA and in other PTA countries. In addition, there is a sufficient market in the subregion for textile products and blankets made from woolen and acrylic yarns.

SUPPORT PROJECT PROFILE NO. 1 (IDDA)

Date of proposal: 1983 Last update: 1991 Type: Institution
Building

1. Project Title: Transformation of Serere research station into a subregional R & D centre (Uganda)

2. Objective: To assist countries in improving food supplies in the subregion by increasing the production of indigenous cereals, root crops and legumes and their utilization in traditional, new and modified food products.

3. Promoter/sponsor: Council of Ministers of the Lusaka-based MULPOC.

4. Location: Uganda.

5. Estimated total cost: \$1,095,000.

6. Project description and additional information:

At its fifth meeting, March 1982, the Lusaka-based MULPOC Council of Ministers endorsed the progress made on composite flour development programmes and adopted a resolution on converting Serere research station into a subregional institution for research and development of composite flours from sorghum, millet and other cereals and cassava. These crops grow well in the subregion and could reduce dependence on imported wheat. Bakery products made from composite flour as against 100 per cent wheat flour offer many advantages to African countries which import wheat in increasing quantities, yet grow non-wheat cereals, roots and tubers suitable for use in composite flour.

These benefits are as follows:

- (a) Reduction of dependence of local bakeries and associated industries on wheat imports, thus leading to foreign exchange savings;
- (b) Increased utilization of indigenous products, thus providing production incentives;
- (c) Increased industrial investment, thus generating employment;
- (d) Increased food self-sufficiency;
- (e) Convenience as a 'vehicle' for improved nutrition through the addition of flour(s) from high-protein legumes.

The centre would also give demonstrations of industrial-scale processing of these materials, root crops and legumes and provide training in that field. There has been little progress in the development of the station as a subregional R & D centre because of the changes in the political situation in Uganda in recent years. In fact, research activities have been transferred to Arapai Agricultural College, 28 miles from Serere.

Recommendation: The project should be kept in abeyance until such time as normal activities are resumed at the station.

7. Remarks: Project still to be kept in abeyance until normal activities can be resumed at the Serere research station.

SUPPORT PROJECT PROFILE NO. 2 (IDDA)

Date of proposal: 1983 Last update: 1988 Type: Institution Building

1. Project Title: Assistance to the African Regional Organization for Standardization (ARSO) and the African Institute for Higher Technical Training and Research (AIHTTR)

2. Objective: To enhance and strengthen the capacity of both institutions to assist countries in improving; (a) national standards, quality control; and (b) services of African technicians, technologists and engineers through producer-oriented training.

3. Promoter/sponsor: ECA/OAU/UNIDO/ARSO/AIHTTR.

4. Location: Nairobi, Kenya.

5. Estimated total cost: (a) \$100,000 for ARSO; (b) \$200,000 for AIHTTR.

6. Project description and additional information:

(1) ARSO: (a) The immediate project objective is to: (i) harmonize or introduce national standards for priority areas in the subregion; (ii) harmonize or introduce certification marking schemes in the subregion; (iii) assist the countries of the subregion in establishing and operating national metrology programmes; (iv) establish a technical standards documentation and information service at the ARSO secretariat; (v) train technical staff in the field of standardization, quality control, certification marking and metrology; (vi) assist countries of the subregion in strengthening their national standards bodies (NSB); and (vii) involve the countries of the subregion in the activities of international organizations concerned with standardization, quality control, certification marking and metrology; and (b) Project outputs: (i) Review of standardization, quality control, certification marking and metrology practices in the subregion; (ii) Establishment of technical committees in priority fields; (iii) Preparation of standards of particular interest to the subregion; (iv) Collection and dissemination of data on standardization and related activities in the subregion; and (v) Survey of legal and industrial metrology practices in the countries of the subregion.

This project is being implemented.

(2) AIHTTR: This project aims at: (i) Producing cadres in specific technical fields of importance to industry and R & D; (ii) Re-training of technical trainers, emphasizing the technological reorientation of education and training schemes; and (iii) Clearing-house activities, including comparisons/consensus on technical educational standards/qualifications, manpower profiles and data base, and collection and dissemination of information on industrial and technical training. This project is being implemented. ARSO received assistance from UNIDO. Further assistance is approved by UNDP. Both ARSO and AIHTTR have co-operated with ECA and UNIDO in carrying out a number of activities. The Directory for SADCC countries has been prepared.

SUPPORT PROJECT PROFILE NO. 3 (IDDA)

Date of proposal: 1983 Last update: 1988 Type: Direct Support

1. Project Title: Inventory of subregional training facilities
 2. Objective: To prepare an inventory of industrial training facilities in the subregion and strengthen a limited number thereof in order to improve industrial manpower training in the subregion.
-

3. Promoter/sponsor:

SADCC.

4. Location:

SADCC Industrial Co-ordination Unit, Dar-es-Salaam, Tanzania.

5. Estimated total cost:

Information not available.

6. Project description and additional information:

The project is designed to provide a complete survey of all training facilities/schemes in the subregion on the basis of which comprehensive subregional training programmes can be prepared and implemented. Although the project is being promoted by the SADCC, it is planned to expand its scope to include the other countries in the subregion and to involve AIHTTR and other relevant institutes. In carrying out the survey, information which would contribute to the preparation of an inventory of the industrial structure of the subregion should also be collected.

The directory has been prepared by the SADCC Secretariat for SADCC countries. However, it needs to be extended to cover other countries in the subregion. UNIDO has also extended assistance to some of the institutions in the subregion, such as the ZISCO Training Centre and is considering further assistance to other centres to strengthen their capabilities to become centres of excellence.

SUPPORT PROJECT PROFILE NO. 4 (IDDA)

Date of proposal: 1983 Last update: 1988 Type: Direct Training

INDUSTRIAL SUPPORT AREA: Industrial manpower development

1. Project Title: Managerial and technical personnel training
2. Objective: To train the managerial and technical personnel required for subregional industrial development.

3. Promoter/sponsor:

SADCC.

4. Location:

SADCC Industrial Co-ordination Unit, Dar-es-Salaam, Tanzania.

5. Estimated total cost:

Further information on costs to be furnished by SADCC.

6. Project description and additional information:

(a) Background: A project idea discussed during a UNIDO programming mission to certain SADCC countries, whereafter SADCC undertook a feasibility study and some training has started at ESAMI.

(b) Immediate objective: To plan and implement training programmes for managerial and technical personnel at the Eastern and Southern African Management Institute (ESAMI), Dar-es-Salaam, in such areas as: (i) small-scale industries development and management; (ii) Project planning, evaluation and management; (iii) Production management; (iv) Stock control and warehouse management; (v) Financial management; (vi) Planning, evaluation and management of transport projects.

(c) Project activities: Although the SADCC has already undertaken a preliminary study relating to the project and ESAMI is already providing some training for managerial skills, there is a need for UNIDO, in co-operation with ECA and OAU, to assist SADCC in conducting a more comprehensive survey to determine the training needs of the subregion. On the basis of that survey training programmes could be drawn up for implementation during the second phase, within the framework of the IDDA and UNIDO's technical co-operation programme in Africa. Considerable assistance is also being extended to the countries and organizations in the subregion in the training of industrial technical and managerial skills.

(d) The scope of the project will be expanded to include other countries in the subregion.

SUPPORT PROJECT PROFILE NO. 5 (IDDA)

Date of proposal: 1983 Last update: 1988 Type: Institution
Building

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

2. Objective: To develop or strengthen industrial management and consultancy institutions and policies in order to improve industrial management and consultancy in the subregion.

3. Promoter/sponsor:

SADCC.

4. Location:

SADCC Industrial Co-ordination Unit/Tanzania Industrial Studies and Consultancy Organization (TISCO), Dar-es-Salaam, Tanzania.

5. Estimated total cost:

\$891,000.

6. Project description and additional information:

(a) Background: A project idea discussed during a UNIDO programming mission to certain SADCC countries.

(b) Immediate objective: To develop or strengthen industrial management and consultancy institutions and policies designed to contribute to the effective implementation of the subregional industrial development programme. To utilize the services of TISCO in Tanzania and in Zimbabwe:

All Metal Founders - foundry and general
Conolly - foundry and general
Kornkarni (Pvt) Ltd - consultancy firm.
Morewear Industries - wagons and rolling stock
Nel Cochraine - boilers and water pumps
NIMR and Chapman - foundry and general
Samuel Osborne - mining equipment
Tinto Industries - agricultural implements and trailers
W.S. Craster - foundry and general
Zimplow - agricultural implements ox-drawn

(c) Project activities/cost/duration: Project activities are still to be defined: total costs are estimated at \$891,000. It is proposed that the project last two years. The SADCC Industrial Co-ordination Unit has already prepared a directory of industrial consultancy firms in SADCC countries.

(d) Suggestion: The scope of the project will be expanded to include other countries in the subregion.

SUPPORT PROJECT PROFILE NO. 6 (IDDA)

Date of proposal: 1983 Last update: 1991 Type: Direct Support

INDUSTRIAL SUPPORT AREA: Industrial manpower development

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

2. Objective: To upgrade entrepreneurial capabilities in the small-scale industry subsector thereby promoting the establishment of the small-scale and manufacturing industries required during the second Industrial Development Decade for Africa (1991-2000).

3. Promoter/sponsor:

IOC, SADCC and PTA; ECA/OAU/UNIDO.

4. Location:

5. Estimated total cost:

- a) Project personnel \$300,000
- b) Training workshops and study tours for African entrepreneurs \$300,000
- c) Equipment \$300,000

6. Project description and additional information:

The project aims at assisting African countries in laying the foundation for the accelerated, rational and integrated development of the small-scale industry subsector with a view to satisfying basic consumer needs and development needs in rural and urban areas. The directory of project profiles is expected to provide local small-scale industrial entrepreneurs with the detailed information and guidance they require for initiating, preparing and implementing small-scale industrial projects, with or without the help of extension services. It is envisaged that the directory of project profiles will be developed into a handbook for entrepreneurs and African investors interested in small-scale industrial promotion units and also may lead to the establishment of an Information Management System (IMS).

ECA undertook an initial project in this field (Ref: ECA/INR/SSI/WP/2 - Directory of Project Profiles on Small-Scale Industries in Africa). The first edition of the directory has already been completed and distributed by ECA. Furthermore, UNIDO has produced and distributed a study on "How to start manufacturing industries" containing project profiles for small-scale industries.

The importance of this project has been reiterated during preparatory mission by representative of the small-scale sector and of several small-scale development corporations. The project should also enable exchange of information and expertise on appropriate technologies.

SUPPORT PROJECT PROFILE NO. 7 (IDDA)

Date of proposal: 1983 Last update: 1988 Type: Institution
Building

1. Project Title: Improvement and development of the cement industry
 2. Objective: To provide assistance to the SADCC member countries in developing and improving their cement and allied products industries.
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3. Promoter/sponsor:

SADCC.

4. Location:

SADCC Industrial Co-ordination Unit, Dar-es-Salaam, Tanzania.

5. Estimated total cost:

Project costs still to be established.

6. Project description and additional information:

A project idea discussed during a UNIDO programming mission to certain SADCC countries.

Immediate objective: To establish a network of national institutions (co-ordinated by the SADCC Industrial Co-ordination Unit), which will: (i) gather and disseminate technical information related to cement and allied products; (ii) initiate and co-ordinate subregional R & D programmes on cement and allied products, including feasibility studies; (iii) provide consultancy and advisory services; and (iv) organize training programmes, study tours, fellowships as well as meetings and workshops on various aspects of cement and cement-related industries.

Project activities: Assistance has been extended by UNIDO to the countries of the subregion in the preliminary assessment of their cement industries. A follow-up project has been approved for financing from the UNDP regional IPF for the fourth programming cycle so as to enable UNIDO to undertake further, more detailed studies.

SUPPORT PROJECT PROFILE NO. 8 (IDDA)

Date of proposal: 1988 Last update: 1991 Type: Institution Building

1. Project Title: Upgrading of Kenya Textile Training Institute (KTTI) into a subregional training centre (Kenya)

2. Objective: To provide training in textile manufacturing to countries in the African region.

3. Promoter/sponsor: Ministry of Technical Training and Applied Technology, Kenya.

4. Location: Nairobi, Kenya.

5. Estimated total cost: US\$950,000

6. Project description and additional information:

KTTI runs six-month courses for apprentices and six-week courses for skills-upgrading in all stages of textile manufacturing. It has modern textile machinery and laboratory equipment, as well as boarding facilities for 120 trainees. KTTI is keen to receive trainees from other African countries.

7. Remarks:

Project included in Integrated Industrial Development Programme for the PTA as AGRO/07, "Training Strategy for the Development of an Integrated Management System for the Textile Industry in Kenya for PTA countries".

S U P P O R T P R O J E C T P R O F I L E N O. 9 (I D D A)

Date of proposal: 1988 Last update: 1988 Type: Institution
Building

1. Project Title: Upgrading of Ethiopian Management Institute into a subregional training centre (Ethiopia)

2. Objective: To provide management training and consultancy services to the subregion.

3. Promoter/sponsor:
Government of Ethiopia/EMI.

4. Location:
Debrezeit, Ethiopia.

5. Estimated total cost:
To be determined.

6. Project description and additional information:

EMI was established in March 1985, as an autonomous public organization, accountable to the Ethiopian Council of Ministers. EMI has a staff of 50 full-time national lecturers, all post-graduate degree holders with 7-10 years experience, and assisted by 5 international experts provided by UNDP/ILO.

EMI runs short-term programmes (ranging from a few weeks to 6 months), diploma courses of 6 to 12 months duration, and degree courses of one-and-one-half to two years. The areas of training include general management, organization and methods, finance and accounting, production management, marketing, materials management, construction and transport management, management information systems, management of training, project analysis and management, etc.

The Management Training Centre of EMI, located 50 km from Addis Ababa, has 6 lecture halls, a conference hall (120 seats) and a library, as well as board and lodging facilities to international standards (200 beds). EMI is ready to extend its training courses to participants from other African countries and to organize seminars and specific courses at the request of international organizations.

SUPPORT PROJECT PROFILE NO. 10 (IDDA)

Date of proposal: 1988 Last update: 1988 Type: Institution
Building

1. Project Title: Regional Sugar Cane Training Centre for Africa (RSCTCA)
(Mauritius)

2. Objective: To provide training in technology of all aspects of sugar
production and utilization of sugar cane by products.

3. Promoter/sponsor:

RSCTCA/UNDP.

4. Location:

Rduit, Mauritius.

5. Estimated total cost:

To be determined.

6. Project description and additional information:

Established in 1980, RSCTCA runs four three-month courses alternately in English and French, in sugar manufacture, sugar cane agronomy, analysis of sugar products and chemical control of sugar factories, and sugar engineering. Designed primarily to provide training for African students, the activities of the centre have been extended to cover the Asian and Arab regions. Thus, at the end of 1987, 350 students from 36 developing countries had followed the courses on a full-time basis.

The Mauritius Sugar Industry Research Institute provides the centre with laboratories, library, lecture rooms, experiment stations and most of the lecturers from its professional staff. The centre is subsidized by UNDP, which has also provided equipment to augment the laboratories of the institute and supplement the centre's own teaching equipment. The centre is willing to arrange special courses and group training programmes for fellows sponsored by UNIDO, but these have to be negotiated in advance through the UNDP Representative in Mauritius. The ability of the centre to serve the subregion is also contingent upon an assessment of the needs of the countries in the subregion.

7. Remarks:

A project to promote and further develop the centre is being studied by UNIDO following the recommendation of an Expert Group Meeting for the development of co-operation of African countries in the sugar industry recently organized by UNIDO.

SUPPORT PROJECT PROFILE NO. 11 (IDPA)

Date of proposal: 1988

Last update: 1991

Type: Institution
Building

1. Project Title: Upgrading of Management Training and Advisory Centre (MTAC) into a subregional centre (Uganda)

2. Objective: To provide management training services, consultancy and advisory services, as well as research and information services to the subregion.

3. Promoter/sponsor: Government of Uganda/MTAC.

4. Location: Kampala, Uganda.

5. Estimated total cost: PTA project HRS/02 estimates a total cost of US\$1,880,000 for both MTAC and Zimbabwe Institute of Management (ZIM).

6. Project description and additional information:

MTAC is a parastatal body under the Ministry of Industry and Technology. It was established in 1965 by UNDP/ILO, and offers training programmes for the lower, middle and top management in the areas of general management, management development, functional management (e.g. accounting, marketing, production personnel etc.), and sectoral management (e.g. small enterprise). Seminars and training in specialist areas are also organized at the request of client organizations. MTAC also provides consultancy services to public and private enterprises in the areas of corporate planning, general management, business appraisal, marketing and sales management, production management and engineering, financial control, project management and small-scale entrepreneurship development. The Centre's capacity is as follows:

Training: 300 man/weeks per year, including top, middle and supervisory management seminars in various functional areas and entrepreneurial development.

Management consultancy: 200 man/weeks per year.

Research and information services: 100 man/weeks per year.

MTAC has an administration building containing 48 offices and a large store room; a training building containing five classrooms and two conference halls; an engineering workshop for entrepreneurial training and demonstration in carpentry, metalwork, automotive repairs, and electrical repairs; and a small library and audio visual aids unit. Its total land area is three hectares built up and six hectares still free. The Centre still lacks lodging (and boarding) facilities and up-to-date training facilities. MTAC receives about 800 students for the 50 short-term training courses (1-5 weeks duration) it organizes every year. Currently the MTAC has 15 full-time professionals (i.e. trainers, consultants, researchers), plus a variety of administrative and technical support personnel, many of whom also carry out professional work. In addition, the Centre engages the services of some part-time

professionals as the need arises. Arrangements are under way for the professional development of some MTAC staff by association of management and training institutions of Eastern and Southern Africa. Currently, MTAC is carrying out agricultural management training (AMTA) in collaboration with African Development Bank (ADB) and Pan African Institute for Development. MTAC is ready to receive students from the subregion, as it used to do in the past.

Follow-up:

The nature and cost of additional facilities required to upgrade the Centre will have to be assessed and arrangements made for the related financing. These facilities would include hostel for course participants, related catering facilities, new professional services building, additional library facilities, additional audio visual facilities, computer unit, additional staff houses, additional administrative support facilities, additional professional staff, programme for professional development of MTAC staff, etc.

7. Remarks:

Project included in Integrated Development Programme for the PTA as HRS/02, "Industrial Management Development Programme for the PTA Subregion", a project to assist both MTAC and the Zimbabwe Institute of Management (ZIM), in collaboration with other management training institutes in the subregion.

SUPPORT PROJECT PROFILE NO. 12 (IDDA)

Date of proposal: 1988 Last update: 1988 Type: Institution
Building

1. Project Title: Upgrading of training and design facilities of the spare parts manufacturing plant into a subregional centre (Ethiopia)
2. Objective: (i) To upgrade the plant into a design and prototype fabrication centre as well as an information and training centre; (ii) to provide consultancy services for the design and fabrication of spare parts in local workshops of other African countries; and (iii) to supply manufactured industrial spare parts as well as hand tools and cutlery.

3. Promoter/sponsor:
Ministry of Industry Ethiopia.

4. Location:
Akaki, Shoa Province, Ethiopia.

5. Estimated total cost:
To be determined.

6. Project description and additional information:

The spare parts manufacturing plant is now under construction with the financial assistance of the Government of Italy. The total investment cost is \$85 million of which \$57.6 million is in foreign exchange. It is due to be completed in February 1989. It will supply spare parts to the food, textiles, building materials and metal-working industries of Ethiopia. It will also produce various types of hand tools and cutlery for the domestic and export markets. At full capacity, the plant will produce 3,600 types of spare parts and 2.2 million pieces of hand tools and cutlery, per year. It is equipped with a foundry with a yearly capacity of 4,450 tons, forging and machine shop units, a design centre and a training centre.

Follow-up:

UNIDO's assistance is being sought in developing the factory's links with industries in the subregion and in carrying out a market study on the possibility of exporting mass-produced hand tools and cutlery to countries in the subregion.

SUPPORT PROJECT PROFILE NO. 13 (IDDA)

Date of proposal: 1988 Last update: 1988 Type: Institution
Building

1. Project Title: Establishment of a subregional cement institute at the Mughher cement plant (Ethiopia)
 2. Objective: To assist countries in the subregion in all aspects of cement production.
-

3. Promoter/sponsor:
Ministry of Industry Ethiopia.

4. Location:
Mugher, Ethiopia.

5. Estimated total cost:
\$3.4 million in foreign exchange.

6. Project description and additional information:

Project ongoing since September 1984, at full capacity of 300,000 tons of clinker per annum. Expansion underway to double plant production capacity and due to be completed by end of 1989.

Follow-up:

UNIDO to mobilize funds and take all necessary steps to set up a subregional cement institute under the management of the Mughher cement plant.

SUPPORT PROJECT PROFILE NO. 14 (IDDA)

Date of proposal: 1988 Last update: 1988 Type: Institution
Building

1. Project Title: Upgrading the Mogadishu Industrial Vocational Training Centre (IVTC) into a subregional centre (Somalia)
2. Objective: To enlarge the existing facility in terms of machinery/equipment and personnel.

3. Promoter/sponsor:

Government of Somalia.

4. Location:

Mogadishu, Somalia.

5. Estimated total cost:

To be determined.

6. Project description and additional information:

Located on the periphery of Mogadishu, the Centre was established in June 1985 to train the industrial workforce of governmental, parastatal and private enterprises for the betterment of the economy and industry of Somalia. The Centre is an institution of the Ministry of Labour and Sports of Somalia, and it is assisted by the Federal Republic of Germany through the offices of GTZ. Training is offered in the mechanical, electrical and automative trades. The Centre can accept 128 trainees at any one time.

SUPPORT PROJECT PROFILE NO. 15 (IDDA)

Date of proposal: 1988

Last update: 1991

Type: Institution
Building

1. Project Title:

Establishment of a Metallurgical
Technology Centre for PTA countries
(Zimbabwe)

2. Objective:

To promote the development of the iron and steel industry in the PTA countries through the establishment of a Metallurgical Technology Centre.

3. Promoter/sponsor:

PTA secretariat and Government of Zimbabwe.

4. Location:

Redcliff, Zimbabwe.

5. Estimated total cost:

As reported to Second Meeting of PTA Ministers of Industry, 27-28 September 1990, Nairobi (Document PTA/MIN/IND/II/2),:

"The budget proposals were prepared in accordance with overall activity - prioritization planned for during first five years. The budget also reflected the phased recruitment of personnel and procurement of equipment. A total sum of US\$5.5 million had been earmarked for construction of the buildings and infrastructural development and US\$21.5 million for equipment and utilities. The recurrent costs were estimated at US\$0.8 million, 1.6 million and 2.8 million for the years I, II and III respectively. These would include salaries and wages for personnel, utilities and maintenance, costs of equipment etc. It was envisaged that the Centre, when fully-fledged, would be able to earn some revenues through consultancy in various technical services (viz preparing information on plant operations, material specification, industrial failures, geological and mineralogical data: as well as through the various applied Research and Development on indigenous ores and raw material) and commercial services (viz consultancy in offering market and survey feasibility reports). The Centre would however, have to depend on the PTA member countries to meet a large portion of its operating costs in the world."

6. Project description and additional information:

The PTA subregion is well-endowed with mineral resources such as iron ore, coal, chrome ore, nickel, cobalt, titanium, copper and refractory materials/fluxing minerals such as silica, magnesite, limestone, fluospor, etc. The coal resource of the subregion is estimated at approximately 54,604 million tons with Zimbabwe accounting for the largest share, followed by Botswana and Mozambique. Large deposits of iron ore reserves are to be found in several countries, notably Angola, Madagascar, Mozambique, Zambia and Zimbabwe. However, very little commercial exploitation of some of these resources is carried out and the processing of iron ore in particular is at an elementary stage.

The subregion has a total of about 23 steel plants/rolling mills capable of melting ferrous metallic raw materials in a furnace for casting semis or processing semis into finished products. The largest and only integrated steelworks is the Zimbabwe Iron and Steel Company (ZISCOSTEEL), Redcliff, Zimbabwe. ZISCOSTEEL is equipped with blast furnace and oxygen converters and has a finished steel production capacity of 850,000 tons per year. The subregion has a liquid steel-making capacity of 1.2 million tons per year. Nevertheless actual capacity utilization in the production of steel in the region is only about 25 per cent.

The subregion however lacks well-equipped laboratories to test the quality of raw materials, semi-manufactured and manufacture products. Research work on iron ores, coal and other mineral and refractory materials are very elementary and limited to the immediate needs of a particular steel plant/rolling mill. To promote iron and steel development, it is necessary to encourage and develop applied research and development in raw material inputs, process and production technology in various branches of metallurgy including testing and beneficiation of minerals, metal refining, fabrication, etc.

The proposed Metallurgical Technology Centre is envisaged as a centre of excellence, undertaking R & D work on various aspects of iron and steel and ferrous metallurgy industries development. The Centre could provide technical services through its data bank and library documentation facilities as well as assist in the transfer, adaptation and development of technology. It would be basically divided into three main departments: (i) scientific and research department; (ii) technical services; and (iii) a design department.

The PTA secretariat has already approached some donor countries to assist in the preparation of a project document for the establishment of the Centre and to consider providing technical and financial assistance for its implementation. One of those donor countries has submitted a proposal whose total cost is estimated at \$32,950,000. The Member States have decided to establish a Steering Committee consisting of experts from Ethiopia, Tanzania and Zimbabwe as well as PTA, UNIDO and the ECA secretariats, to determine the required facilities and prepare a work programme for the Centre, due account being taken of the experience already gained in other developing countries/regions.

7. Remarks:

Project included in Integrated Industrial Development Programme for the PTA as MET/01, "Initiation of activities of the PTA Metallurgical Technology Centre". Project discussed at tenth meeting of PTA committee on Industrial Co-operation (Nairobi, 20-25 September 1990) and second meeting of PTA Ministers of Industry (Nairobi, 27-28 September 1990), and it was agreed that the Centre would be established in a phased manner over a five-year period, and that for a start, it would be housed at the Institute of Mining Research at the University of Zimbabwe until the construction of the building of the PTA MTC at the site provided by the Government of Zimbabwe was completed. This would mean that the services of MTC would be available to member states immediately.

SUPPORT PROJECT PROFILE NO. 16 (IDDA)

Date of proposal: 1988 Last update: 1991 Type: Institution Building

1. Project Title: Promotion of spare parts production in PTA countries (Kenya/Malawi/Mauritius/Somalia/Tanzania/Uganda/Zambia/Zimbabwe)
2. Objective: To assist the consumers of spare parts in PTA countries to establish a regional centre for the promotion of cast and machined spare parts.

3. Promoter/sponsor: PTA secretariat.

4. Location:

Selected countries of PTA. The following countries possess the potential for spare part production: Kenya, Tanzania and Zimbabwe. The eventual location of the centre will be decided upon by the Member States on the basis of the results of preparatory work. Current project expanded to cover more PTA countries. See "Remarks" below.

5. Estimated total cost:

US\$80 - 120 million total for all countries.

6. Project description and additional information:

One of the major constraints on industrialization in the PTA subregion and Africa as a whole is the inadequate development of technology. Africa relies on foreign sources for technology, machinery and equipment and spare parts. Africa's heavy reliance on imported machinery and equipment is a veritable source of foreign exchange leakage. According to the ECE Bulletin of Statistics on World Trade in Engineering products, the region's bill for engineering products, mainly machinery and transport equipment, was \$40 billion FOB in 1981, of which \$4.1 billion was for spare parts. During the period 1980-1985, it is estimated that imports of spare parts was approximately \$25 billion. Eastern and Southern Africa is believed to have spent approximately \$6 billion FOB on imported spare parts.

In the light of the above and given the gross shortage of spare parts for industrial plants, machinery and equipment, there is a growing tendency in the PTA subregion to encourage the domestic manufacture of spare parts within the existing forging, heat treatment and machine shop facilities. In Kenya, for example, the Kenyan Railway Workshop in Nairobi produces spare parts for the railways and sugar mills and other orders on specification; Margat Singh Engineering works produces spare parts such as gears and rollers. Ndume Ltd concentrates on the production of spare parts for agricultural implements. In Tanzania, the Tanzania-Zambian Railway Authority manufactures essential spare parts for the railway. The main products of the National Engineering Co. Ltd range from road pullies, roll bodies for sisal and sugar factories to wheels for mining wagons. Zimbabwe, on the other hand, has a good number of engineering firms, integrated foundry, forging and machine shop facilities capable of producing a wide range of spare parts for industrial plants,

agricultural machinery and implements, transport equipment, mining and quarrying equipment, etc.

There is, however, a need to harmonize these activities in an integrated subregional programme with the aim of promoting the production of spare parts of the right quality and quantity to meet the needs of consumers. It is estimated that with proper specifications and careful analyses, design and manufacturing parameters, the prices of locally produced spare parts could be 40-50 per cent lower than imported spare parts. In order to do this, it is necessary to establish the local technological base or a centre necessary to advise and orientate both consumers and producers and through which technical assistance and training could be given to both consumers and producers of spare parts in the subregion. Such a centre would also specify materials, production processes and engineering data, and offer technical assistance to consumers and manufacturers of spare parts.

7. Remarks:

Project included in Integrated Industrial Development Programme for the PTA as ENG/02, "PTA programme for the production of spare parts". That project foresees capital investments of US\$10 to US\$15 million per country for the establishment of a centralized, integrated spare parts manufacturing complex on a country level basis.

SUPPORT PROJECT PROFILE NO. 17 (IDDA)

Date of proposal: 1988 Last update: 1991 Type: Institution Building

1. Project Title: Tanzania Institute of Leather Technology (Tanzania)
2. Objective: To provide training facilities for both domestic and subregional leather industries.

3. Promoter/sponsor: Tanzania Leather Associated Industries, P.O. Box 5640, Dar-es-Salaam, Tanzania.
4. Location: Mwanza, Tanzania.
5. Estimated total cost: \$1.2 million.

6. Project description and additional information: The leather and leather products industries sector in Tanzania is considered to be one of the country's major processing industries catering for the people's basic needs in footwear and other leather products. Export of semi-processed leather and leather products from the existing production units contribute to the economy as an important source of foreign exchange revenue.

The efficient running of the leather and leather products industries depends not only on the top management of the enterprises but also (and above all) on the availability of efficient middle and lower technical personnel and management executives. With this objective in mind, it was decided to establish the Institute of Leather Technology in Mwanza. Implementation of the project started in 1980. It was financed through the Government and through contributions from UNIDO which supplied the equipment under project US/URT/79/240 and supervised its installation. In addition to training, the Institute will provide research and development facilities. It will also undertake such work as to assist the overall development of the subsector.

Construction work was completed at a cost of ShT34 million. The equipment supplied by UNIDO under project US/URT/79/240 is valued at \$500,000. However, the Institute is not yet operational for lack of expatriate tutors and teaching aids during the initial operational phase. Mobilization of resources amounting to \$1,224,000 (ShT118,728,000) is needed to finance expatriate tutors, train local tutors and provide text books and other teaching equipment that is being sought from external sources. The project is included in a regional project on a hides and skins, leather and leather products improvement scheme being implemented with the assistance of UNIDO.

The Institute is located on a site easily accessible by air, road and rail. Water and electricity are available. Given the major demand for training opportunities in Tanzania and in neighbouring countries, the Institute is expected to serve all the SADCC and PTA countries. At present, its capacity is 48 graduates in leather technology per annum (30 at the diploma level and 18 at the certificate level). However, consultations between the various leather technology institutes in the subregion should be held under the auspices of SADCC and PTA, with the assistance of UNIDO and ECA.

7. Remarks: During the discussion of the project for establishing a PTA Leather and Leather Products Institute in Addis Ababa, at the tenth meeting of the PTA Committee on Industrial co-operation and the second meeting of PTA Ministers of Industry in Nairobi (Kenya) 20-28 September 1990, it was proposed that the Tanzania Institute of Leather Technology, along with other leather institutes in PTA countries, be part of the LLPI network in the subregion.

SUPPORT PROJECT PROFILE NO. 18 (IDDA)

Date of proposal: 1988 Last update: 1988 Type: Institution
Building

1. Project Title: Consolidation of the Institute of Cement Technology (Tanzania)
 2. Objective: To meet the fast growing technological requirements in the fields of cement, glass ceramics and clay associated products.
-

3. Promoter/sponsor:
Tanzania Saruji Corporation, Dar-es-Salaam, Tanzania.

4. Location:
Klazo Hill, Dar-es-Salaam, Tanzania.

5. Estimated total cost:
To be determined.

6. Project description and additional information:
Saruji Training Institute was established to serve the companies belonging to the Tanzania Saruji Corporation, a holding parastatal for companies engaged in the production of building materials and allied products. These are: Tanzania Portland Cement Company, Tanga Cement Company, Mbeya Cement Company, Tanzania Sheet Glass Company, Morogoro Ceramics Wares Ltd, Nyanza Glass Works, Tanzania Clay Products, Saruji Trucking Company, Tanzania Gypsum Company and Pre-fabricated Concrete Manufacturing Plant.

The Institute consists of the following centres:

1. Training centre.
2. Research and Development centre.
3. Central workshop.

The training centre is fully established, while the other two centres pertain to future plans. The training centre offers courses in the areas of production, mechanical and electrical engineering, and maintenance of transport and quarry machinery in the cement industry. The Institute can accommodate up to 80 participants at a time. Some of the course pertaining to cement production include: general introduction course for technical personnel, mill operators' course, quality control testers' course, quality control analysis, chemical industrial technicians' course and in-plant training. Graduates of the Saruji Training Institute are awarded a professional certificate on successful completion of specific series of course and final examinations. The Institute requires strengthening in the field of staff development, including provision of teaching materials and equipment. It has the potential to fulfill training needs pertaining to the cement industry in the subregion.

SUPPORT PROJECT PROFILE NO. 19 (IDDA)

Date of proposal: 1988 Last update: 1988 Type: Pilot

1. Project Title: Establishment of a pilot and demonstration physical manufacturing facilities at TEMDO (Tanzania)
2. Objective: To provide essential support service facilities to the engineering and allied metalworking industries on a national and subregional basis.

Promoter/sponsor: Tanzania Engineering and Manufacturing Design Organization (TEMDO), Arusha, Tanzania.

4. Location: Arusha, Tanzania.
5. Estimated total cost: \$3.9 million.
6. Project description and additional information:

The activities of the engineering and allied metalworking industries subsector have been affected and retarded by the non-availability of precision parts, dies, moulds, tools, jigs, fixtures, simple and special purpose tools, gauges and large number of engineering items that cannot be manufactured owing to lack of urgently needed support service facilities in the country. TEMDO is a national centre for engineering design and manufacturing that is expected to be well equipped with physical facilities in order to assist local industries in:

- Adapting designs best suited for local manufacture.
- Supplying prototype machinery, equipment and spare parts.
- Providing trained manpower, particularly practical designers for local manufacture and improvement.
- Supplying precision parts and component tools, dies, moulds, etc.
- Undertaking applied R & D in metal and engineering development aspect.
- Supplying technical information on design and manufacturing and providing consultancy services for general promotion of the industrial sector.

The existing facilities at TEMDO, which is accessible by air, road and rail, include office block and workshop premises with a total floor area of 5,039m². The office block is ready and about 60 per cent of the workshop has been completed for installation of machinery and equipment. Electricity and water are available.

The existing administrative and design support service structure consists of:

- A design department with six design engineers and three draughtsmen.
- A prototype development and testing section (without machinery and equipment).
- A technical extension services and consultancy section with four engineers.
- An administrative and finance section with 12 staff, headed by the Director-General as the Chief Executive of TEMDO.

The activities of TEMDO have been slowed down by the non-provision of machinery, equipment and physical facilities. The project proposal involves provision of: (a) a pilot and demonstration forge and heat treatment shop; and (b) a pilot and demonstration toolroom.

Sponsor is to follow-up resource mobilization for the supply of the machinery and equipment etc., and completion of the civil works. Furthermore, TEMDO is to contribute the local component cost of the project amounting to \$102,950 to cover national staff, land and building, furniture and fittings, office equipment and facilities, common service facilities, internal travel, operating funds, storage facilities and miscellaneous expenses. Technical assistance amounting to \$3.8 million to pay for international staff and training, as well as some machinery and equipment are being sought from subregional, regional and international organizations.

The provision of these facilities will provide local industries with inputs to facilitate the improvement of capacity utilization as envisaged in the Government's economic recovery programme. Furthermore, the services to be offered are in great demand by all engineering and allied metalworking industries, and the Centre is expected to serve all the industries in the country and SADCC/PTA member countries.

SUPPORT PROJECT PROFILE NO. 20 (IDDA)

Date of proposal: 1988 Last update: 1988 Type: Institution
Building

1. Project Title: Establishment of a pilot demonstration toolroom and engineering design centre (Zimbabwe)
2. Objective: To contribute to self-sufficiency in engineering design and local tool supply to local industries.

3. Promoter/sponsor:

Ministry of Industry and Technology, Zimbabwe.

4. Location:

Bulawayo, Zimbabwe.

5. Estimated total cost:

Z\$7,659,000 (Government inputs) and \$5,000,000 (UNDP inputs).

6. Project description and additional information:

The pilot and demonstration toolroom and engineering design centre will be the focal point institution for the development of indigenous capability in engineering design for capital goods, intermediate goods, durable consumer goods and local manufacture of precision spare parts for the Zimbabwean industries, and production of highly skilled designers and operatives for the multisectoral needs in the engineering and allied industries sectors, agricultural machinery and equipment industries, transport industries and mining. It will also contribute to establishing local design standards and enhancing local consultancy services.

Establishment of the centre will contribute to resolving some of the institutional, engineering, technological, management and manpower constraints on local industries. It will also help create a self-sustained engineering base as well as provide scope for considerable savings in terms of foreign exchange that would otherwise be spent on toolroom products from abroad.

SUPPORT PROJECT PROFILE NO. 21 (IDDA)

Date of proposal: 1991 Last update: 1991 Type: Direct Support

1. Project title: Study to assess the potential for adding value to commodities passing through Namibia from neighbouring countries
2. Objective: To identify possible industrial-venture projects with high potential to add value to commodities passing through Namibia from neighbouring countries
3. Status of implementation: Idea stage
4. Partner/sponsor/institution: Namibian authorities, UNIDO, SADCC
5. Location: Namibia
6. Estimated cost: US\$ 150,000
7. Estimated duration: six months
8. Action required/recommendations: To elaborate a project concept
9. Project description and additional information:

This project idea emerged during discussion between UNIDO staff and the Permanent Secretary of the Ministry of Planning (National Planning Commission) in Windhoek. The project is expected to :

- Assess natural resources available in the subregion
- Assess commodities that could be exported through Namibia and those with potential for processing
- Analyse possible complementarities in terms of raw materials and expertise between Namibia and Eastern and Southern Africa countries that may use Namibia as a channel/outlet to external markets and possible joint ventures between Namibian and Eastern and Southern Africa enterprises
- Assess available expertise and skills needed for the provision of services for the transit of commodities through Namibia (impact on least developed areas)
- Establishment of service and training centres for Namibia and partners countries
- Analyse the impact of existing custom and trade regulations
- Analyse the possibility of using trucks bringing in goods to be exported from Namibia to export goods to the countries of origin.

This viability of the project seems to be justified by the considerations given below:

- (i) comparative advantage of Namibia: better infrastructure than many other ES countries and access to external markets;
- (ii) recent examples of transit though Namibia of Zambian copper and potential for processing;
- (iii) recent example of services provided to Angola and Zambia (provision of operation and management services for sewage and water supply systems to Angola, power supply to Zambia and Angola, training and maintenance services for locomotives to Angola and Zambia, etc.);
- (iv) better quality of servicing capabilities for mining (maintenance, repair and production of spare parts) in Namibia;
- (v) the expected implementation of projects to establish and improve road and air linkages with neighboring countries (see: Namibia. Development and Investment, FNDC, Department of Economic Affairs, Rev. Ed., Oct. 1990);
- (vi) poor condition of exporting and processing facilities of other ES outlet harbors;
- (vii) availability of energy, communication infrastructure, expertise;
- (viii) possible complementarities between infrastructural, human and natural resources available in Namibia and commodities that could pass through Namibia (copper, timber, chrome, meat, hides and skins, etc.) and potential for processing and manufacturing;
- (ix) possible impact of the transit routes (Namibia, Namibia/Botswana) on the establishment of small-scale service, repair, maintenance and spare part production units. (This would fulfill the development objective of decentralization of production and services in the rural or least developed areas).

SUPPORT PROJECT PROFILE NO. 22 (IDDA)

Date of proposal: 1991 Last update: 1991 Type: Direct Support

1. **Project title:** Study on the impact of the construction of the Trans-Kalahari Road to generate industrial venture projects with countries in the subregion
2. **Objective:** To identify possible industrial joint-venture projects in relation to the construction of the Trans-Kalahari Road
3. **Status of implementation:** idea stage
4. **Partner/sponsor/institution:** to be defined
5. **Location:** Botswana
6. **Estimated cost:** US\$150,000
7. **Estimated duration:** six months
8. **Action required/recommendations:** To elaborate a project concept
9. **Project description and additional information:**

This project ideas emerged during discussion between UNIDO staff and officials from the Ministry of Finance and Development Planning. The aim of the project is to assess the impact of the construction of the 220 million Pula Trans-Kalahari road on industrial development and trade. This project could also be linked with the IDDA support project no. 21.

S U P P O R T P R O J E C T P R O F I L E N O. 23 (IDDA)

Date of proposal: 1991 Last update: 1991 Type: Direct Support

1. Project title: Assistance in exploring and establishing links (e.g. SADCC) to project information registers, import agencies and trade organizations which could put Namibian exporters in contact with an increasing number of customers
2. Objective: To increase export capabilities of Namibian exporters
3. Status of implementation: idea stage
4. Partner/sponsor/institution: to be determined
5. Location: Windhoek
6. Estimated cost: N/A
7. Estimated duration: N/A
8. Action required/recommendations:

The project has been included in the Terms of Reference of the local expert in charge of preparing the Namibian national programme for the second IDDA.

9. Project description and additional information:

SUPPORT PROJECT PROFILE NO. 24 (IDDA)

Date of proposal: 1991 Last update: 1991 Type: Direct Support

1. **Project title:** Assessment of the potential spin-off of the SUA PAN soda ash project and possible partnerships and complementarities with countries in the subregion to process by-products
2. **Objective:** To identify possible by-products of the SUA PAN soda ash factory which could be processed by countries in the subregion according to existing complementarities.
3. **Status of implementation:** Indications of possible by-products of the SUA PAN are given in the feasibility studies undertaken for the establishment of the factory
4. **Partner/sponsor/institution:** N/A
5. **Location:** Botswana and other Eastern and Southern African countries
6. **Estimated cost:** N.A.
7. **Estimated duration:** N.A.
8. **Action required/recommendations:** to be determined
9. **Project description and additional information:**

The Sua Pan Soda Ash is by far the largest single investment project ever undertaken in Botswana. The project will provide direct employment for about 550 people and over 1,000 workers will be employed during its construction. In addition, the project has the potential to generate other economic activities. The project is at the construction stage, with most of the steel work finished. The possible activities related to the construction and operation phases, as well as for the use of by-products are : (i) crushed stones; (ii) portland pozzolana cement (PPC); (iii) plastic bags; (iv) carbon dioxide; (v) foundry; (vi) potash/fertilizers; (vii) detergent; (viii) glass manufacturing; (ix) chlorine and caustic soda.

SUPPORT PROJECT PROFILE NO. 25 (IDDA)

Date of proposal: 1991 Last update: 1991 Type: Institution Building

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1. Project title: Establishment of diamond cutting facilities and training centre

 2. Objective: To share know-how and possibly to establish links between Namibia and Botswana to process diamonds and other precious stones

 3. Status of implementation: Idea stage

 4. Partner/sponsor/institution: to be determined

 5. Location: Botswana and Namibia

 6. Estimated cost: N/A

 7. Estimated duration: N/A

 8. Action required/recommendations: To be determined

 9. Project description and additional information:

Namibia and Botswana are at present major exporters of rough gems but do not process them. Recently, the government of Botswana and Lazare Kaplan International (LKI), a US jewellery firm, signed a long-term agreement (5 December 1990) for the establishment of a diamond cutting and polishing factory in Botswana. In this perspective, possible co-operation with Namibian producers could be envisaged.

SUPPORT PROJECT PROFILE NO. 26 (IDDA)

Date of proposal: 1991 Last update: 1991 Type: Direct Support

1. **Project title:** Update a feasibility study to exploit coal reserves as alternative source for energy production to be exported to neighbouring countries

2. **Objective:** To assess the economic viability to exploit coal reserves in Botswana.

3. **Status of implementation:** idea stage

4. **Partner/sponsor/institution:** to be determined

5. **Location:** Botswana

6. **Estimated cost:** N/A

7. **Estimated duration:** N/A

8. **Action required/recommendations:** To be determined

9. **Project description and additional information:**

The project is under discussion, and its viability is related to economies of scale and demand forecasts mainly in Zambia and Zimbabwe, and on oil prices.

SUPPORT PROJECT PROFILE NO. 27 (IDDA)

Date of proposal: 1991 Last update: 1991 Type: Institution
Building

1. **Project title:** Strengthening the capabilities for monitoring, follow-up and control of trade protocols and agreements of the PTA Secretariat

2. **Objective:** To improve the implementation of trade protocols and agreement in the PTA countries.

3. **Status of implementation:** Idea stage

4. **Partner/sponsor/institution:** PTA Secretariat.

5. **Location:** PTA Secretariat

6. **Estimated cost:** N/A

7. **Estimated duration:** N/a

8. **Action required/recommendations:** To be determined

9. **Project description and additional information:**

During preparatory mission in the subregion, the need to strengthen the capability at the PTA Secretariat level to monitor the implementation of existing trade protocols and agreements. This project needs to be further elaborated by the PTA Secretariat.

S U P P O R T P R O J E C T P R O F I L E N O. 28 (IDDA)

Date of proposal: 1991 Last update: 1991 Type: Direct Support

1. Project title: Processing of semi-precious stones (SSI)

2. Objective: To improve technical and marketing capabilities of SSI engaged in processing of ornamental semi-precious stones

3. Status of implementation: idea stage

4. Partner/sponsor/institution: to be determined

5. Location: Namibia, Botswana, Lesotho

6. Estimated cost: N/A

7. Estimated duration: N/A

8. Action required/recommendations:

to survey existing production facilities, and skills, as well as availability of raw material and demand

9. Project description and additional information:

The project has been conceived to provide assistance to small-scale industries in the subregion to establish contacts which may lead to exchange of information, training and marketing capabilities and facilities.

S U P P O R T P R O J E C T P R O F I L E N O. 29 (IDDA)

Date of proposal: 1991 Last update: 1991 Type: Direct Support

1. **Project title:** Feasibility study for the exploitation of phosphate reserves in the Barren islands

2. **Objective:** To assess the viability of exploiting phosphate reserves in Madagascar

3. **Status of implementation:** Opportunity study completed

4. **Partner/sponsor/institution:** Ministry of Economy and Planning, Madagašćar

5. **Location:** Barren Islands, Madagascar

6. **Estimated cost:** N/A

7. **Estimated duration:** N/A

8. **Action required/recommendations:**

To carry out a mineral testing survey of the existing reserves and a study of the infrastructural facilities needed for the commercial exploitation of the phosphste deposits.

9. **Project description and additional information:**

An opportunity study has been undertaken by two consulting companies in Madagascar under the supervision of the project evaluation unit of the Ministry of Economy and Planning. The study indicated the necessity to carry out studies on infrastructural needs and geological surveys.

S U P P O R T P R O J E C T P R O F I L E N O. 30 (IDDA)

Date of proposal: 1991 Last update: 1991 Type: Direct Support

1. **Project title:** Market study for the production of fishing nets
2. **Objective:** To assess existing production and demand of fishing nets in IOC countries
3. **Status of implementation:** under discussion
4. **Partner/sponsor/institution:** N/A
5. **Location:** IOC
6. **Estimated cost:** N/A
7. **Estimated duration:** N/A
8. **Action required/recommendations:**

To carry out a market study of fishing nets demand and existing production capability in IOC countries.
9. **Project description and additional information:**

SUPPORT PROJECT PROFILE NO. 32 (IDDA)

Date of proposal: 1991 Last update: 1991 Type: Institution
Building

1. **Project title:** Programme and fund to support the establishment of joint-ventures between partners in the subregion
2. **Objective:** To support and finance joint ventures among IOC countries
3. **Status of implementation:** idea stage
4. **Partner/sponsor/institution:** to be determined
5. **Location:** IOC
6. **Estimated cost:** N/A
7. **Estimated duration:** N/A
8. **Action required/recommendations:** Investment promotion activities
9. **Project description and additional information:**

A preliminary list of potential joint ventures was identified during the preparatory mission to IOC countries. For all of these projects, which are at different stages of implementation, promoters have already been identified. However, several actions would be required such as technical, financial, market, procurement studies, identification of technical or financial partners, establishment of a partnership protocol, legal assistance, training, technology transfer negotiation, etc. Against this background, a fund should be created, for supporting and financing all the pre-investment activities needed, and mechanisms for co-financing should be defined. This project should also consider the potential opportunity to cover also other Eastern and Southern African countries.

SUPPORT PROJECT PROFILE NO. 33 (IDDA)

Date of proposal: 1991 Last update: 1991 Type: Direct Support

1. **Project title:** Programme for the promotion of export of industrial products and assistance to the packaging industry
2. **Objective:** To promote export of industrial products outside IOC countries
3. **Status of implementation:** under discussion
4. **Partner/sponsor/institution:**
5. **Location:** IOC
6. **Estimated cost:** N/A
7. **Estimated duration:** N/A
8. **Action required/recommendations:** To prepare a project concept/document
9. **Project description and additional information:**

The project concerns the elaboration and implementation of a programme for the promotion of exports of industrial products, covering international trade aspects, standardization, packaging, etc., for products manufactured by two or more countries in the area.

A UNIDO consultant during a mission in September/October 1990 has identified some of these products with high export co-operation potential such as fine leather articles and accessories, textiles, garments, copra, essential oils, tropical fruit juices, aromatic essences, wood products and furniture. Moreover, in order to compete in the international markets, a packaging centre could be established in Madagascar. The centre should aim at: (i) training personnel of producers and users of packaging materials; (ii) technical and economic study of the need and potential for the packaging industry; (iii) analysis of quality control and standard packaging.

SUPPORT PROJECT PROFILE NO. 34 (IDDA)

Date of proposal: 1991 Last update: 1991 Type: Institution
Building

-
1. **Project title:** Programme for standardization, quality control and metrology in IOC countries

 2. **Objective:** To improve the quality of industrial products in IOC countries through strengthening and/or setting up new institutions such as standardization and quality control bureaux and metrology and testing laboratories

 3. **Status of implementation:** Preliminary assessment undertaken by UNIDO expert (UC/G20/89/274)

 4. **Partner/sponsor/institution:** UNIDO/ISO

 5. **Location:** IOC countries

 6. **Estimated cost:** N/A

 7. **Estimated duration:** N/A

 8. **Action required/recommendations:**

to compare existing programmes for standardization, quality control and metrology in other developing countries

 9. **Project description and additional information:**

According to UNIDO's Project Proposal dated 10 October 1989, the objective of UNIDO's endeavour is twofold:

 - * To assist industrialists to assure the quality of production. This includes strengthening and/or setting up new institutions such as standardization and quality control bureaux and metrology and testing laboratories. These institutions prepare standards and provide advisory, training, testing and calibration services to local industries.

 - * To assist Government authorities in developing countries to ensure the quality of locally produced or imported goods through national and sectoral institutions.

To achieve these objectives regional co-operation between Indian Ocean Islands should be strengthened.

Based on the above mentioned goals the consultant has designed the scope of the mission as follows:

- * To check in the various visited countries what is available in matters such as standardization, metrology, quality control and quality assurance.
- * To find out which are the relations existing between Governmental bodies dealing with quality matters and local industries.
- * To determine the co-operation level on quality matters between the visited countries.
- * To determine how to strengthen the regional approach in the above mentioned areas of interest.

A preliminary report of the UNIDO consultant with the main findings and recommendations is available.

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Second Follow-up Subregional Meeting on the
Promotion of Intra-African Industrial Co-operation
within the Framework of the Industrial
Development Decade for Africa (IDDA)
Kampala, Uganda, 13-16 March 1991

REVISED INTEGRATED INDUSTRIAL PROMOTION PROGRAMME
FOR THE EASTERN AND SOUTHERN AFRICAN SUBREGION
PROPOSALS FOR THE SUBREGIONAL PROGRAMME FOR THE SECOND IDDA

PROJECT PROFILES

Background document No. 2

Corrigendum

Cover page

The date of the Meeting should read as above.