Industrial Cooperation

SADCC Blantyre 1981

SOUTHERN AFRICAN DEVELOPMENT CO-ORDINATION CONFERENCE:

Blantyre, Malawi; 19 - 20 November, 1981

F O R E W O R D

Industrial Cooperation, which has been prepared by the Government of the United Republic of Tanzania, arises out of a series of regional consultations in Southern Africa. The paper is presented to the Blantyre Conference as basis for discussion rather than a definite statement of policy. Further regional consultations will be taking place among SADCC member states before the Conference and a supplementary note will be circulated to participants if the paper requires further amplification or correction.

October 1981

SADCC INDUSTRIAL COOPERATION

Memorandum by the Government of the United Republic of Tanzania

INTRODUCTION

1. This memorandum is an application of the principles and procedures presented in the paper considered at the SADCC Ministerial Meeting held at Salisbury, Zimbabwe, in September 1980. As desired by the Ministers at that meeting, further data were analysed and consultations held at official level meetings of the member countries. Their recommendations have been incorporated in this memorandum which seeks to present an action plan towards meeting the five-fold objectives stated in paragraph 2 of the initial memorandum and listed below:

   (a) to reduce external dependence (nationally and regionally) on imports of industrial products and inputs from outside the region;

   (b) in particular to reduce dependence on the Republic of South Africa which is the largest single source of such products and inputs for five of the nine SADCC states and a significant one for two more;

   (c) to increase the size (absolutely and relative to total national production) of the industrial sector both nationally and regionally;

   (d) to increase the scope and diversity of the industrial sectors of the member states and the region through increasing the range of final products, intermediate goods and capital goods produced;

(e) to increase the linkages within the national and regional industrial sectors to make particular industries and industrial activity as a whole more integrated and self-reliant and less dependent on raw materials, intermediate inputs and spares from outside the region.

2. This Paper is divided into five parts:

(i) Priority Industrial Project Areas;
(ii) Promotion of Industry by Regional Trade;
(iii) Regional Development of Minimum Needs Industries;
(iv) Core Industries;
(v) Modalities for Implementation.

The Regional Industrial Plan is centred at the national level and is related to the needs, priorities, plans, and resources of the nine member states - Angola, Botswana, Lesotho, Malawi, Mozambique, Swaziland, Tanzania, Zambia and Zimbabwe. Hence a country-wise analysis has been made in Annexure I (Country Industrial Profiles) that is basic to the Regional Plan, under the headings of:

(1) National Resources
(2) Principal Crops
(3) Livestock Products
(4) Industry-Selected Products
(5) Main Commodities Traded
(6) Details of Imports
(7) Details of Exports
(8) Principal Commodities Produced
(9) Manufacturing
(10) Trends in Industrial Development

References will be made to these headings in the course of describing the complementarities and mutualities of co-operation envisaged in the Action Plan.

PRIORITY INDUSTRIAL PROJECT AREAS

3. Priority industrial project areas in the region relate specifically to the satisfaction of basic needs in food, clothing, housing, health care, water and power supply, transport and communications, and education. The pattern of production branches required to strengthen industrial capacity in the project areas is illustrated below:

Project Area / Production Sector:	Engineering	Metallurgy	Chemicals	Raw Materials
FOOD linked with: Regional Food Security Plan	packing, canning, bottling machinery, pre-harvest equipment, parts, components, fertiliser & pesticide plants, machine tools	aluminium tubing, strip, sheet steel, etc., foundries, forges, heat treatment	fertilisers, pesticides, feeds, glass, basic chemicals, paper, additives, preservatives	phosphate rock, potash, salt, sulphur, petroleum, natural gas, coal, water, wood, seeds, sand, iron ore
CLOTHING (garments, textile fabrics, shoes)	Machines for garments and shoes, textile machines, farming machines; fertiliser, pesticide and petrochemical plants; parts components, machine tools	steel foundries, forges	wood pulp, feeds, dyes, fertilisers, petrochemicals, pesticides, basic chemicals	fibres, wool, hides and skins, phosphates, rock, coal, potash, petroleum, natural gas, salt, wood, iron ore
HOUSING (building and construction materials)	sawmills, construction equipment excavators, mixers, cranes; plants for cement, glass, steel, plastics, bricks; parts, components, machine tools	steel; alloys, etc. structures aluminium, hardware, fittings, tubes, strips, sheets, forging, foundries	cement, lime plastics, brickwork, glass, asbestos, ceramics, fibreboard, paint, glue	wood, iron ore, bauxite, timber, clays, sand, limestone, soils, salt, petroleum, natural gas

Project Area	Production Sector: Engineering	Metallurgy	Chemicals	Raw Materials
HEALTH CARE (drugs, vitamins, vaccines, tools, etc.)	pharmaceutical plants; X-rays, microscopes, etc.; medical equipment machines for sanitaryware, parts, components, machine tools	steel, etc., foundries, forges, heat treatment, etc.	pharmaceuticals, bandages, glass, plastics, paper, basic chemicals	medicinal plants, animal products, wood, petroleum, sulphur, coal hydrocarbons, iron ore, sand
WATER SUPPLY AND POWER	pipes, water pumps, cisterns, drilling and construction equipment; electric meters, generators: transformers, power lines, parts, components, machine tools, etc.	steel, copper cables, aluminium, foundries, forges	cement, concrete, plastics, rubber, paint, glue, chlorine, etc. batteries	iron ore, copper ore, bauxite, limestone, salt, petroleum, natural gas, sulphur, aluminium sulphate
TRANSPORT AND COMMUNICATIONS	motor vehicles, buses, lorries, trucks; trains, rolling stock, equipment for construction of roads, railways, ports; steam boats, barges, tugs; telephone and telegraph; radio sets broadcasting equipment, electronics, parts, components and accessories; machine tools	cables, steels, aluminium, foundries, forges, heat treatment	cement, bitumen, plastics, asbestos, glass, rubber, fibres, fuel, batteries, basic chemicals	iron ore, copper ore, bauxite, wood, gravel, sand, soils, limestones, asphalt rock, petroleum

Project Area	Production Sector: Engineering	Metallurgy	Chemicals	Raw Materials
EDUCATION (skills) (books, libraries, laboratories, workshops)	teaching apparatus, instruments and equipment; machines for pulp and paper, news-print and other printing paper; laboratory and workshop tools; printing machines	steels, etc. foundries, forges	pulp and paper, news-print, writing paper, ink, printers' ink, pencils, plastics, dyes, basic chemicals	wood, iron ore, other ores, graphite, etc. coal, petroleum, salt, sulphur

4. The above pattern is within the framework of the Monrovia Strategy of July 1979. Its implementation would require that priorities be accorded to the following sectors:

(i) Food and Agro-industries;
(ii) Building materials and construction industries;
(iii) Metals and metal products industries;
(iv) Engineering and engineering products industries;
(v) Chemical industries, and
(vi) Forest Based Industries.

5. As may be observed from the heading (1) of Annexure I, the region has an abundance of natural resources for the raw material inputs to the priority industrial sectors. Headings (9) and (10) would show that all the countries have taken initiatives to develop the priority sectors relatable to their needs and resources. The shortfalls, nevertheless, are considerable in processed food, dairy products, edible oils, clothing, building materials, and items of mass consumption based on primary processing and value added manufature, as would be evident from the imports of such items, listed under headings (5) and (6).

The rationale of the Regional Cooperation Plan is in brief to link needs, resources, investments and capabilities, the potential for which is evident from the Table given below:

Country	US$ millions Exports of Goods 1979	US$ millions Imports of Goods 1979	Population '000 mid 1979	GDP Value US$ million 1979
Angola	*786	*720	6,905	2,490
Botswana	*200	*220	775	*299
Lesotho	* 28	*160	1,300	240
Malawi	233	399	5,652	1,200
Mozambique	*190	*360	10,203	2,360
Swaziland	220	350	525	*274
Tanzania	523	1,084	17,538	4,130
Zambia	1,377	755	5,468	3,240
Zimbabwe	1,194	940	7,147	3,640
Total	4,751	4,983	55,713 ~~62,605~~	17,893

* 1976 - 1977 data

Sources: 1. World Development Report, 1981

2. United Nations: Yearbook of International Trade Statistics, 1977

PROMOTION OF INDUSTRY BY REGIONAL TRADE

6. Much of the imports from South Africa (see Annex IV), including a substantial share of manufactured goods, can be met by trade exchanges within the Region. Increased intra-regional trade, backed up by appropriate mechanisms, would result in the better utilisation of existing industrial capacities, enhance the viability of industrial projects proposed in the national plans, and make possible the undertaking of production enterprises that would otherwise be beyond the financial and technical capabilities of national projects.

7. In endeavouring to suggest the specific framework for trade and industry-oriented linkages, an examination and analysis, country-wise, has been made of industrial commodities exported and imported, under headings (5), (6) and (7) of Annex I. A matching of these in terms of principal commodities, is suggested in Annexure 2, as a framework which could be amplified in negotiations between the concerned countries. The commodities listed in this annexure are in the product range of existing industrial capacities, and cover essential commodities and items of mass consumption which figure prominently in the import bill, particularly from South Africa. These items are: edible oil, processed food and fruits, meat products, plastics, paints and varnishes, textiles, iron and steel products, ceramic ware, candles, umbrellas, paper products, industrial machinery, agricultural pumps, tractors, salt, tobacco products, insecticides, glass containers, agricultural implements, aluminium utensils, and automotive parts.

REGIONAL DEVELOPMENT OF MINIMUM-NEEDS INDUSTRIES

8. On the basis of the Priority Industrial Project Areas detailed in paragraph 3, and trade linkages detailed in paragraph 7 above, an action plan for regional development of minimum needs industries suggests itself. This is based on existing capabilities in resources and capacities, but linkages on a regional basis for processed intermediates (yarn, unrefined edible oil, PVC, cement, etc.) would enable the development of medium and small industries in all the countries of the region. Such linkages enabling economic and dispersed industrial growth throughout the region towards meeting minimum needs and promoting self-reliance are illustrated in Annex III. A complementary framework for development of these industries, in accordance with national plans (reference heading 10 of Annex I) is suggested overleaf:

Priority Project Area	Industries	Countries
Food	Edible Oils	Angola and Tanzania secondary medium/small industries in all the nine countries
	Processed Vegetables and Fruits	Angola, Lesotho, Malawi, Zambia
	Fertiliser Mixing	Angola, Mozambique & Tanzania secondary medium/small industries
	Agricultural Implements	Angola, Swaziland, Tanzania, Zimbabwe
	Agricultural Pumps	Mozambique
	Pesticide Formulation	Medium/small industries in all the nine countries
	Sugar	Angola, Malawi, Swaziland, Tanzania, Zambia & Zimbabwe
	Salt	Tanzania, Zimbabwe small sector refining in Lesotho and Botswana
	Meat and Meat Products	Botswana, Mozambique, Swaziland and Tanzania
Clothing	Yarn	Angola, Malawi, Mozambique, Tanzania, Zambia and Zimbabwe
	Fabrics	Weaving units in all the nine countries linked to yarn supplies
	Garments	In all the nine countries
Housing	Cement	Angola, Mozambique, Tanzania, Zambia and Zimbabwe
	Cement Blocks, Pipes, Screens and Mosaic Tiles	In all the nine countries, linked to cement supplies
	Bricks	In all the nine countries
	Tiles	Angola, Lesotho, Swaziland and Tanzania
	Ceramic Ware	Angola, Lesotho, Tanzania
	Wooden Doors and Furniture	Angola, Mozambique, Tanzania and Zambia

Priority Project Area	Industries	Countries
Housing (Contd)	Glass Products	Tanzania, Swaziland, Zambia
	Builders' Hardware	In all the nine countries
	Plastic Products	In all the nine countries linked to supplies of plastic resins
	Paints and Varnishes	Angola, Mozambique, Swaziland and Zimbabwe
Health	Medicines (Formulation)	Lesotho, Tanzania, Zimbabwe
	Veterinary Medicines	Botswana
	Surgical Cotton and Bandages	In all the nine countries
	Soaps and Detergents	Angola, Botswana, Lesotho, Mozambique, Tanzania, Zambia and Zimbabwe
Water Supply and Power	Pipes: ERW black and galvanised steel pipes, PVC pipes & RCC pipes	Tanzania, Zambia, Zimbabwe
	Motors and Transformers	Angola, Mozambique, Swaziland, Tanzania and Zimbabwe
	Wires, Cables and Meters	Angola, Malawi, Mozambique, Swaziland, Tanzania, Zambia, Zimbabwe
Transport	Assembly of Buses and Commercial Vehicles	Angola, Tanzania, Zambia, Zimbabwe
	Railway Equipment	Malawi, Mozambique, Tanzania, Zambia and Zimbabwe
Education	Paper	Angola, Malawi, Tanzania, Swaziland
	Exercise Books	In all the nine countries linked to paper supplies
	Stationery Items	In all the nine countries
	Office and School Equipment and Aids	Botswana, Tanzania, Zambia, Zimbabwe

CORE INDUSTRIES

9. A long term perspective should include the development of core industries relating to manufacture of basic fertilisers (both nitrogenous and phosphatic), pesticides, and pharmaceuticals. Advance planning would also be applicable for development of primary steel plants. Valuable studies for the development of these industries in the Region have been made by ECA and UNIDO in the context of projected needs from 1980 - 1985 and the resources of natural gas in Tanzania and Mozambique, coal in Zambia and Swaziland, hydro-electric potential in Malawi, Zambia, Mozambique and Angola; phosphate rock in Tanzania, Malawi, Zimbabwe and Angola; sulphur/pyrites in Angola, Tanzania, Zimbabwe and Zambia; and copper ore in Zambia. The development of the iron and steel industry is based on the expansion of existing plants and development of the primary industry in Angola, Mozambique, Swaziland, Tanzania and Zambia, and the establishment of secondary steel facilities in Malawi, Botswana, and Lesotho based on billets supplied by the primary producers and locally available steel scrap. The development of capital goods engineering industries is also a subject of study by the UNIDO/ECA, envisaging upgradation and diversification of existing capabilities. Countries covered so far in the study are Tanzania and Zambia.

MODALITIES FOR IMPLEMENTATION

10. The linkages in trade referred to in paragraph 7 above would need to be developed on the basis of negotiations between the concerned countries and on the lines of a trade plan framework as for instance in the recent example of Tanzania/Mozambique.

A time framework of about three years for each trade plan would enable industries to gear up to the committed supplies. An essential element of the Trade Plan would be the operation of a payment mechanism by the Central Banks of the Trading Countries.

11. The regional plan of development of complementary industries would require the preparation of feasibility studies for each project area relatable to priorities in the national plans and linkages in the regional framework. While these are national projects, their viability and commercial operations will depend on linkages with industries in other countries of the region. International organisations, like the Commonwealth Fund for Technical Co-operation (CFTC) and its Industrial Development Unit (IDU) would be prepared to provide technical assistance for the development and implementation of these projects in accordance with national investment policies.

12. In the context of core industries indicated in paragraph 9 above, advance action needs to be considered, for instance, in the undertaking of project studies complementary to the work of UNIDO/ECA.

13. As the projects indicated in paragraph 8 are to be developed in the short term on commercial lines, action would have to be initiated to assist in generating the required inputs (credit, joint-venture partners, technology sourcing and its transfer) for implementation.

14. The Plan would have to depend on considerable programme support which could be provided by co-operation of the concerned agencies in the Region. This would relate to the drawing up of regional standards and the sharing of facilities for on-the-job training, participation in apprenticeship schemes, entrepreneurship development, exposure visits and exchange of expertise and experience, particularly in the small and medium sectors.

These and other programmes would facilitate the development of human resources essential for industrial progress and collective self-reliance of the Region.

15. The SADCC Sub-Committee of Industrial Co-ordination may be entrusted with the work relating to the implementation of this regional plan for industrialisation, subject to such directions as may be given by the SADCC Ministerial Meeting. A workshop is proposed to be held at Arusha in a few months to catalyse co-operation in terms of technical assistance, technology transfer, joint enterprises, foreign collaboration and investments for implementation of specific projects.

ANNEXURES

COUNTRY INDUSTRIAL PROFILE - ANGOLA

Area Sq. Kms. 1,247,000 Population (1977) 6.19 million

1. NATURAL RESOURCES

Oil.

Total Production 1974, 10m. tonnes (1976, 8m).

Minerals

The country possesses valuable diamond deposits. Production of diamonds during 1973 totalled 2,124,719 carats (1974, 1.94m.; 1975, 750,000). Production (1973) of iron ore, 6,052,194 tonnes; salt, 96,717 tonnes.

Agriculture

The principal crops are coffee, maize, sugar, palm-oil and palm kernels. Other products are cotton, wheat, tobacco, cacao, sisal and wax.

Livestock (1976): 3m cattle, 200,000 sheep, 900,000 goats, 400,000 pigs.

2. PRINCIPAL CROPS

	AREA HARVESTED ('000 hectares)			PRODUCTION ('000 metric tons)			YIELD (100 kg per hectare)		
	1976	1977	1978	1976	1977	1978	1976	1977	1978
Wheat	13!	13!	13!	13*	10*	10*	10.0!	7.7!	7.7!
Rice (Paddy)	20!	20!	20*	25*	25*	20*	12.5*	12.5*	10.0*
Maize	600!	600!	600!	450!	350!	400!	7.5*	5.8*	6.7*
Millet and sorghum	93!	80!	80!	80!	50!	50!	8.6*	6.3*	6.3*
Potatoes	5*	6*	6*	35*	40*	35*	64.8*	72.7*	63.6*
Sweet potatoes, yams	18*	18*	18*	165*	170*	170*	91.7*	94.4*	94.4*
Cassava (Manioc)	120*	120*	120*	1,740*	1,760*	1,700*	145.0*	146.7*	141.6*
Dry Beans	120*	120*	120*	70*	72*	65*	5.8*	6.0*	5.4*
Groundnuts (in shell)	40*	40*	40*	20*	25*	20*	5.0*	6.3*	5.0*
Sunflower seed	13*	15*	15*	10*	13*	10*	7.7*	8.7*	6.7*
Seed Cotton				39*	36*	39*	6.4*	5.9*	6.4*
Cottonseed	61*	61*	61*	26!	24!	26!	4.3*	4.3*	4.3*
Cotton (lint)				13!	12!	13!	2.1*	2.1*	2.1*
Palm Kernels	n.a.	n.a.	n.a.	12*	13*	12*	n.a.	n.a.	n.a.
Palm Oil	n.a.	n.a.	n.a.	40*	42*	40*	n.a.	n.a.	n.a.
Vegetables	n.a.	n.a.	n.a.	206*	212*	219*	n.a.	n.a.	n.a.
Citrus fruit	n.a.	n.a.	n.a.	80*	85*	80*	n.a.	n.a.	n.a.
Pineapples	n.a.	n.a.	n.a.	25*	25*	20*	n.a.	n.a.	n.a.
Bananas	n.a.	n.a.	n.a.	300*	320*	300*	n.a.	n.a.	n.a.
Sugar cane	15*	16*	17*	530*	700*	720*	353.3*	437.5*	423.5*
Coffee (green)	200*	200*	200*	72!	72!	54!	3.6*	3.6*	2.7*
Tobacco	6!	6!	6*	7!	3!	3!	11.4*	5.0*	5.0*
Sisal	30*	30*	30*	25!	20!	20!	8.3*	6.7*	6.7*

* FAO estimate ! Unofficial estimate

Source: FAO, Production Yearbook

3. LIVESTOCK PRODUCTS

(FAO estimates, '000 metric tons)

	1976	1977	1978
Beef and veal	48	49	50
Goats' meat	3	3	3
Pig meat	12	12	12
Poultry meat	7	7	7
Other meat	5	7	6
Cows' milk	140	143	144
Butter	0.7	0.7	0.8
Cheese	2.0	2.3	2.3
Hen eggs	3.5	3.5	3.6
Cattle hides	6.6	6.7	6.8

4. INDUSTRY - SELECTED PRODUCTS

(metric tons)

	1971	1972	1973	1974
Sugar	76,073	84,215	81,901	70,000
Beer ('000 litres)	81,907	93,884	119,603	n.a.
Fishmeal	72,488	128,599	96,253	63,000
Cement	529,594	624,394	767,549	850,000
Cotton Blankets (number)	679,000	759,000	972,000	n.a.
Flour	72,023	78,637	82,142	n.a.
Soap	15,168	19,735	18,400	n.a.
Tobacco	2,188	2,468	2,596	3,100
Butane	7,043	8,136	8,438	n.a.
Fuel Oil	388,847	377,685	434,629	601,000
Gas Oil	100,807	104,514	104,259	211,000
Motor Spirit	52,385	48,065	63,771	79,000
Bitumen Asphalt	16,733	27,446	17,303	22,000

Electric energy (million kWh): 742 in 1971; 838 in 1972; 984 in 1973; 1,229 in 1974

1975 ('000 metric tons): Sugar 30; Fishmeal 55.2; cement 910.
1976: Sugar 50,000 metric tons
1977: Sugar 65,000 metic tons

5. MAIN COMMODITIES TRADED

(mn kwanzas)

EXPORTS	1978[a]	IMPORTS	1977[a]
Crude oil	7,564	Foodstuffs	8,661
Coffee	3,274	Consumer products	3,350
Diamonds	1,125	Equipment & accessories	3,289
Oil derivatives	660	Transport equipment	2,656
Cement	40	Raw materials	
Fishmeal	32		
Sisal	13		

a January-June

Source: Bank of England 1979 Mission.

6. DETAILS OF IMPORTS

Commodity Description	
Meat of bovine animals	Antisera and microbial vaccines
Condensed milk	Medicaments
Butter	Soap
Cheese	Articles of unhardened vulcanized rubber n.e.s.
Haricot	Exercise books
Tea	Cotton fabrics not bleached
Maize	Cotton bleached or dyed
Rice	Outer garments - mens, women's, girl's and boy's etc.
Wheat flour	Footwear
Palm oil	Shoes of all types (leather, rubber, plastic)
Groundnut oil	Bottles
Soyabean oil	Copper wire, bars, rods, profiles, etc.
Cotton seed oil	Wroughts plates, sheets and strip of aluminium
Sunflower oil	Lead unwrought and alloys
Other prepared or preserved or meat offals	Zinc unwrought and alloys
Sugar unrefined and other products of beet and cane sugar	Locks and padlocks of base metals, metals
Macaroni	Railway wagons
Tomato paste and tomato preparations	Stylographs, pen nibs and nib parts
Jams, fruit jellies, marmalades containing added sugar	Pencils
Fruit juice with added sugar	
Coal	
Petroleum oils and light oils from bitumous minerals n.e.s	

7. DETAILS OF EXPORTS

Commodity Description	
Fresh fish, frozen or chilled	Tubes and other materials of cementile fabrics
Fish salted	Ceramic setts
Horns, hooves, nails not cut to shape	Sinks, wash basins, bidets and other sanitary fixtures
Coffee	Table wares and other articles of porcelain
Oil seeds	Iron tubes for concretes
Fish oil n.e.s.	Salt (refined and unrefined)
Molasses	Quartz
Alcoholic beverages n.e.s.	Marble
Flours of fish	Granite
Bran, sharps derived from milling or working cereals and leguminous vegetables	Cement
Bagasse of groundnuts	Crude Petroleum oil
Hides (dried) of bovine animals	Varnishes, paints
Hides and skins unspecified	Artificial and manufactured wax without solvents
Plastic articles	Prepared glues n.e.s.
Wood in the rough	Polymerization cellulose products (PVC)
Wood transformed	Rubber tyres for motor vehicles
Sisal, raw	
Sisal cordages	
Sacks of synthetic rafia	

8. PRINCIPAL COMMODITIES

('000 escudos)

IMPORTS	1971	1972	1973
Vehicles and Accessories	1,332,017	1,204,599	1,801,157
Iron and Steel	996,338	950,631	1,215,772
Textiles	516,007	n.a.	416,697
Wine	405,547	291,728	303,571
Tractors	290,492	221,770	212,279
Clothing	268,054	n.a.	259,516
Wheat	160,220	142,198	309,489
Medicaments	318,862	409,405	495,624
Fuel Oil	206,919	295,880	422,480
Excavating Machinery	243,124	205,258	52,107
Olive oil	161,863	73,641	61,764
Fertilizers	138,684	127,024	202,117
Tools	186,836	184,740	n.a.
Paper and Paperboard	171,990	165,027	175,710
Pumps	119,508	150,021	137,449
Motors and Parts	126,439	139,775	n.a.
TOTAL (incl. others)	12,127,640	10,728,164	13,268,873

EXPORTS	1971	1972	1973
Coffee	4,026,355	3,834,941	5,090,130
Crude Petroleum	2,157,393	3,535,396	5,755,588
Diamonds	1,523,239	1,583,059	1,999,551
Iron Ore	1,187,495	1,011,666	1,210,823
Raw Cotton	649,201	284,210	619,602
Sisal	221,537	338,937	467,928
Fish Meal	211,639	530,663	740,120
Wood	169,181	174,961	266,988
Maize	181,809	142,760	249,969
Fuel Oil	155,465	93,146	129,279
Dried Fish	125,912	138,844	74,576
Wood Pulp	114,636	111,309	123,787
Palm Oil	63,849	44,643	15,922
Tobacco and Products	62,666	61,245	246,081
Fresh Fish	114,979	227,998	348,972
Bananas	174,806	264,082	313,132
Dried Beans	77,944	76,426	118,945
Excavating Machinery	35,258	430,385	n.a.
Motor Spirit (Petrol)	291	70,460	70,776
Cement	29,208	47,215	101,083
Fish Oil	n.a.	63,079	85,937
TOTAL (incl. others)	12,147,051	13,923,273	19,158,291

Source: Africa: South of the Sahara 1980-1981

9. MANUFACTURING

While still relatively small, representing some 17 per cent of GDP in 1970, manufacturing has considerable potential, owing to the abundance of basic industrial resources (power, iron oil, crude oil). Production of this sector is mainly of consumer goods for the local market and investment has been stimulated by import restrictions, particularly on consumer goods. The value of new manufacturing investment in 1972 was 600 mn escudos, providing work for 5,594, and in 1973 1,276 mn escudos was invested, mainly in the field of textiles, electrical equipment and machinery. The value of output rose at an annual average rate of 19 per cent between 1962 and 1971. Growth in 1972 was 15 per cent and in 1973, 26.5 per cent, to an output value of 14.1 mn escudos.

10. TRENDS IN INDUSTRIAL DEVELOPMENT

Angola has great potential for augmenting agricultural production both in food and cash crops. In the latter category, mention may be made of sisal, cotton, sugar, banana, palm oil, palm kernels, coconut, beans, tobacco, millet, sorghum, tropical and temperate fruits, cocoa and groundnuts. Production of timber, wood pulp and paper manufacture is likely to increase, with substantial export potential. In addition to continued expansion of oil extraction and refining, mining is likely to develop over the next five years; this includes diamond production, increased iron ore mining and introduction of pelletizing, as well as manganese, phosphate and salt. Copper reserves are known to exist.

Angola has vast energy potential, both in its oil and hydro-electric resources. There is the possibility of aluminium smelting to take advantage of low cost hydro-electric power on the Caanza at Cambambe. Other energy intensive industries for regional needs can also be set up.

Growth is expected to continue in the food industry including beer and tobacco. The textile industry is expanding rapidly, and petroleum refining and by-products will increase. Recent industrial activities include paper manufacturing, chemicals, glass, plastics, bicycles, car and truck assembly plants, cement and tyre production, and a project for mining aluminium near the Cambabe Dam.

COUNTRY INDUSTRIAL PROFILE - BOTSWANA

Area Sq. Kms 575,000 Population 0.78 million

1. NATURAL RESOURCES

Minerals

The revenue from the diamond mine at Orapa (production started in 1971, 821,914 carats; 1978, over 2.8m.) and the nickel-copper complex at Selebi-Phikwe (production started in 1974) with production (1978) 40,000 tonnes valued at P51m. An open-pit coalmine has been developed at Morupule, and produced (1978) 315,000 tonnes valued at P4.5m.

Mineral resources in north-east Botswana are being investigated, including salt and soda ash on the Sua Pan of the Makgadikgadi Salt Pans, nickel-copper at Selkirk and Phoenix, copper south of Maun and close to Ghanzi, and coal at Mmamabula.

Production of semi-precious stones (1976), 41 tonnes; diamonds (1975), export value P31.9m.; coal (1976) 224,175 tonnes; copper-nickle matte (1976), 32,506 tonnes.

2. PRINCIPAL CROPS

	AREA* ('000 hectares)			PRODUCTION ('000 metric tons)			YIELD* (100kg/hectare)		
	1976	1977	1978	1976	1977	1978	1976	1977	1978
Maize	80	65	70	63	35	45*	7.8	5.5	6.4
Millet	10	10	10	5*	5*	5*	5.0	5.0	5.0
Sorghum	100	100	100	56	33	55*	5.6	3.3	5.6
Roots and tubers	1	1	1	6*	7*	7*	48.5	50.0	51.6
Pulses	30	30	30	14*	16*	18*	4.7	5.3	6.0
Groundnuts (in shell)	7	8	8	7*	7*	7*	9.6	9.3	9.3

* FAO estimates

Source: FAO, Production Yearbook

Official Figures: maize production (metric tons): 1974/75 28,677; 1975/76 62,137; 1976/77 64,800; sorghum production (metric tons): 1974/75 33,843; 1975/76 55,540; 1976/77 77,600.

3. LIVESTOCK PRODUCTS

(FAO estimates, '000 metric tons)

	1976	1977	1978
Beef and veal	44	41	45
Mutton and goat meat	5	5	5
Cows' milk	75	81	84
Hen eggs	0.5	0.5	0.5
Cattle hides	5.3	4.9	5.0

Source: FAO, Production Yearbook

4. INDUSTRY: SELECTED PRODUCTS

Type of Manufacturing	Sales in Millions Pula		Imports of Intermediate Goods Millions Pula	Value Added in Millions Pula
	Locally Sold	Exports		
Building Materials	3,1	0,9	1,9	1,9
Garments and Textiles	0,1	2,9	2,5	0,4
Wood and Wood Products	0,6	0,1	0,3	0,2
Tanning and Leather	0,2	0,8	0,2	0,1
Metal Products	1,2	0,1	0,7	0,5
Beverages	3,3	0,3	1,6	1,6
Paper and Paper Products, Printing and Publishing	0,3	-	0,1	0,2
Agro based Products	0,1	-	-	1,7
Chemical and Rubber Products	2,2	-	0,1	1,7
Miscellaneous	0,2	1,3	0,8	0,7
TOTAL	11,3	6,4	8,3	7,31

Source: Ministry of Commerce and Industry Botswana

5. MAIN COMMODITIES TRADED

(P mn)	1973	1974	1975	1976	1977	1978
Exports fob	59	82	105	154	152	183
of which:						
meat & meat prods	1	2	36	43	49	30
diamonds	20	30	32	38	47	76
Cu-Ni matte	-	8	22	52	40	53
Imports cif	115	125	159	181	210	260
Balance	-56	-43	-54	-28	-58	-77

Source: Central Statistics Office, Ministry of Finance

6. DETAILS OF IMPORTS

Commodity Description	
Coffee	Surface active agents
Tea	Rubber tyres, cases, threads inner tubes and flaps
Flour of wheat	Packing container of paper and paper board
Beet and cane sugar	Jackets, waist coats, trousers, rugs and blankets
Meal of wheat	Footwear (shoes)
Brandy	Sheets of iron or steel
Cigarettes	Tubes and pipes of iron or steel
Portland Cement	Plates universal of iron or steel
Cement fondus, slag cement and hydraulic cement	Machinery - mechanical appliances and parts
Petrol	Motor vehicles, wagons, bodies and parts
Aviation spirit, distillate fuels	Furniture and parts n.e.s.
Lubricating oils and greases	
Medicaments	
Washing preparations	

7. DETAILS OF EXPORTS

Commodity Description	Quantity	
	Estimate	Unit
Boneless beef (chilled and frozen)	25 000	Tons
Carcass beef	5 400	Tons
Beef offal	4 500	Tons
Tallow	3 500	Tons
Corned beef	-	Tons
Blood meal	600	Tons
Carcass meal	4 500	Tons
Candles (ordinary household)	600 000	Numbers
Hides (wet blue and wet salted)	4 500	Tons

8. PRINCIPAL COMMODITIES

('000 pula)

IMPORTS	1976	1977
Food, beverages & tobacco	35,534	47,504
Fuel	19,184	25,327
Chemicals and rubber ..	14,044	18,775
Wood and paper	6,440	8,136
Textiles and footwear ..	21,038	25,571
Metal and metal products	13,125	22,844
Machinery and electrical goods	20,775	31,324
Vehicles and transport equipment	21,198	24,183
Other goods	30,047	35,941

EXPORTS	1976	1977
Meat & meat products	43,001	42,559
Diamonds	37,487	48,364
Copper-nicket matte	51,768	41,162
Other commodities	20,916	24,568

9. MANUFACTURING

Manufacturing capacity is small, contributing about 6 per cent of the GDP. The largest concern is the Lobatse meat cannery, with a second cannery opened in 1977 producing corned beef. The Botswana Development Corporation has so far created about 4,000 jobs, and actively promotes private investment as well as using government finances - in 1976 it established the Botswana Insurance Company and a brewery in Gaborone. The Botswana Enterprise Development Unit trains Batswana as managers for small scale industries - considerable success has been achieved with export-orientated craft enterprises.

10. TRENDS IN INDUSTRIAL DEVELOPMENT

Botswana has three development agencies which promote industrialisation in different areas of the economy, in particular, the infant locally owned industries. These agencies provide loans and technical, financial and managerial advice.

The National Development Bank (NDB) was established under the NDB Act of 1963 to assist traditional agriculture by providing short/medium terms loans for, inter alia, agricultural machinery, water development, good quality breeding stock, the poultry industry and horticulture, and to promote small productive business which create employment and help bring a wider distribution of wealth. Since the Bank's funds are made available by Government on favourable terms, interest rates are lower than those of commercial banks.

The Botswana Enterprises Development Unit (BEDU) a department of the Ministry of Commerce and Industry, was established in 1974. The aim of BEDU is to encourage Botswana-owned and managed industries. The BEDU programme lays emphasis on the establishment of industrial enterprises in rural areas. This is done by extension services either on request or on a regular basis. BEDU has entrepreneurs in the following fields:

- Garment productions (school uniforms, shirts)
- Leather work (tanning, handbags, gameskin processing)
- Metalwork (filing cabinets, water tanks, chairs)
- Building and construction (claybricks, concrete blocks)
- Jewellery and art works (bracelets, semi-precious stones, pottery products).

The Botswana Development Corporation (BDC) is a Government-owned public company set up in 1970 to stimulate larger-scale economic development by identifying viable investment opportunities and developing them either on its own or in partnership with other local or foreign investors. Its interests include property development, air transport, hotels, and farming. Emphasis is now shifting to the industrial sector. The BDC's investment portfolio has six main divisions:

- <u>Agro/industrial</u> : irrigation schemes for food crops and cotton, grain milling and wholesaling.

- Commercial and industrial : supermarket and general dealer business, new tyre sales and retreading, beer brewing and soft drink production.

- Financial services - hire purchase, leasing, insurance and broking.

- Property management and development : industrial commercial and residential property.

- Sub-commercial projects : homecrafts, textiles.

- Tourism, hotels and transport : hotels, game lodges, car hire, airline, travel agent, freight and transport services.

The Ministry of Commerce and Industry, as the responsible body for the industrialisation programme of Botswana, has established a Research and Promotion Section that identifies, investigates and promotes development projects.

Industrial opportunities are either investigated by prospective investors or by bilateral or international technical assistance programmes. Data sheets and short reports containing the relevant data are available for some of the opportunities listed below:

Agro-based Industries :

Dairy products
Brushes and Brooms
Shoe production
Soap production
Sunflower and ground-nut oil
Goat and sheep skin processing
Horn products
Karakul knitwear
Pharmaceuticals
Timber processing

Mineral-based Industries :

Claybricks and non-metallic commodities
Cement production
Gypsum products
Glass products
Gemstone processing
Soda ash, potash and sodium sulphate production
- The deposits could yield 500,000 tons of soda ash, 100,000 tons of potash and 140,000 tons of sodium sulphide a year.

Coal gasification

Mining-linkage Industries :

Protective leather clothing
Foundry products
Work clothing

Other Industries :

Renewable energy
Agricultural implements
Paper products
Assembly plants

The Botswana National Development plan indicates the following projected capital development programme:

NATIONAL DEVELOPMENT PLAN, 1976-81
PROJECTED CAPITAL DEVELOPMENT PROGRAMME
(million pula)

Projected Expenditure by Department	
Agriculture	24.1
Commerce and industry	4.5
Mineral resources and water affairs	16.0
Education	39.8
Health	14.0
Works and communications	85.6
Local government and lands	52.1
Home affairs	1.8
Finance and development planning	3.6
Office of the President	8.5
TOTAL PROJECTED EXPENDITURE	250.0

Financing (inclusive of P25 million designated for Interplan Projects): Government Revenues P79 million; Donors P251 million; To be negotiated P45 million.

The estimated investment for industry for the period of 1981/84 amounts to P9 million.

COUNTRY INDUSTRIAL PROFILE - LESOTHO

Area Sq. Kms 30,340 Population 1.25 million

1. NATURAL RESOURCES

Lesotho is one of the world's 25 least developed countries, with few natural assets other than diamonds and the hydro-electric potential of its rivers. Only about 13 per cent of the land is usable for crop cultivation, and due to population pressure and over-grazing there has been serious soil erosion in the lowlands, with the result that the rest of the land can only be used for grazing, and agricultural expansion has been hindered. Subsistence crops are maize, wheat and sorghum, and there is sheep and goat rearing. There was almost no concerted economic development prior to 1966, and the government's economic priorities, in which it has achieved a modest measure of success, have focused on improving agricultural output, and encouraging the development of communications, industry and tourism.

2. PRINCIPAL CROPS

('000 metric tons)

	1976	1977	1978*
Wheat	61	50	50
Maize	126	70	100
Sorghum	62	50	50
Dry Peas	7	7	7

* FAO estimates

Source: FAO, Production Yearbook

3. LIVESTOCK PRODUCTS

(FAO estimates, metric tons)

	1976	1977	1978
Cows' milk	17,000	18,000	19,000
Beef and veal	10,000	10,000	11,000
Mutton and lamb	4,000	4,000	4,000
Goats' meat	2,000	2,000	2,000
Pig meat	3,000	3,000	3,000
Wool: Greasy	2,100	2,400	2,500
Clean	1,050	1,200	1,300

Source: FAO, Production Yearbook

4. INDUSTRY STRUCTURE

GROSS DOMESTIC PRODUCT (FACTOR COST) BY INDUSTRIAL ORIGIN
CURRENT PRICES, 1973/74 - 1977/78
(in millions of Maloti)

	1/ 1975/76	1/ 1976/77	1/ 1977/78
Agriculture:	37.7	43.6	38.1
Crops	(18.9)	(24.5)	(18.0)
Livestock	(18.8)	(19.1)	(20.1)
Mining and quarrying	1.7	2.7	3.0
Manufacturing	3.6	2.8	2.6
Building and construction	2.6	5.3	13.1
Wholesale and retail trade	12.0	14.9	15.0
Catering	4.3	6.1	8.7
Transport and communications	2.1	2.9	3.6
Ownership of dwellings	8.8	10.9	17.0
Central government	9.3	11.5	18.7
Other 2/	5.2	5.6	6.7
Gross domestic product (factor cost)	87.3	106.3	126.5
Indirect taxes (net)	15.2	24.6	33.7
Gross domestic product (market prices)	102.5	130.9	160.2

1/ IBRD/IMF staff estimates.
2/ Includes electricity and water, finance, insurance and business, and other services.

Source: Bureau of Statistics, National Accounts 1974/75, and IBRD/IMF staff estimates.

5. MAIN COMMODITIES TRADED

Main Imports (million Maloti)

	1973	1974	1975	1976
Foodstuff & livestock	16.0	17.0	21.9	37.9
Mineral fuels & lubricants	2.8	5.4	7.1	11.7
Chemicals	2.8	4.2	6.3	9.5
Manufactured goods (classified by materials)	11.3	17.7	26.5	41.8
Machinery & transport equipment	6.9	8.4	12.8	22.7
Miscellaneous manufactured goods	17.6	24.3	35.6	45.1

Main Exports (million Maloti)

	1973	1974	1975	1976	1977*
Wool	3.2	3.5	1.5	1.7	2.6
Mohair	1.5	1.6	2.3	2.0	1.9
Diamonds	0.3	0.9	0.5	0.5	1.3
Live animals	2.0	1.6	0.4	0.3	0.2
Foodstuff	0.3	0.1	1.1	1.8	0.7
Others (mainly miscellaneous manufactured goods)	1.5	2.1	3.5	8.4	5.4

*provisional

6. DETAILS OF IMPORTS

Commodity Description	Value	Unit Maloti
Wheat and Meslin	165	'000
Maize unmilled	1,975	"
Flours of wheat	6,518	"
Flours of maize	205	"
Meals of maize	4,426	"
Other sugar in solid form	3,952	"
Artificial honey whether or not mixed with natural honey	21	"
Sugar confectionery not containing cocoa	1,122	"
Portland Cement	1,581	"
Petroleum and aviation spirit	3,750	"
Aviation Kerosene, Power Kerosene and heating kerosene	107	"
Distillate fuels (gas)	2,143	"
Power Kerosene and heating Kerosene	3,721	"

7. DETAILS OF EXPORTS

Commodity Description	Value	Unit Maloti
Haricot beans - whole	1,726	'000
Black eyed Peas - whole	63	"
Canned beans in tomato sauce - preserved	50	"
Canned asparagus in air-tight metal container	6	"
Pharmaceuticals	700	"
Candles	69	"
Hides and skins including sheep skin - raw in the wool	64	"
Skeepskin articles of apparel	1	"
Skeepskin car seat covers; covers with a calico lining and covers internally fitted	7	"
Wool and mohair - sheep's or lamb's	3,708	
Handprinted garments, other garments	9	"
Footwear	194	"
Sheepskin slippers footwear	2	"
Fashion knitwear	31	"
Umbrellas	769	"
Furniture n.e.s	1,027	"

8. PRINCIPAL COMMODITIES

('000 Maloti)

IMPORTS	1976	1977
Maize and maize products	6,401	5,501
Other food and livestock	31,544	37,573
Clothing	23,936	30,713
Machinery and Transport equipment	22,730	24,479
Blankets	12,346	11,682
Petroleum products	11,742	17,636
Chemicals	9,525	10,528
Footwear	6,633	6,686
Other	54,768	54,576
TOTAL	179,625	199,374

('000 Maloti)

EXPORTS	1975	1976	1977
Live animals	374	249	232
Wool	1,512	1,719	2,595
Mohair	2,291	1,986	1,925
Diamonds	483	455	1,249
Other	4,580	10,233	6,179
TOTAL	9,240	14,645	12,180

SOURCE: Africa: South of the Sahara 1980-1981

9. MANUFACTURING

A number of small industrial and handicraft concerns have been established with the assistance of the Lesotho National Development Corporation (LNDC), and during 1977 the government launched a campaign to persuade European companies and investors to back a R20 mn, four year program aimed at reducing Lesotho's economic dependence, promoting the country as a stable investment alternative to South Africa. Incentives offered include an intial six year tax holiday, up to 25 per cent capital participation by the LNDC, a building on an industrial estate. LNDC concerns include two industrial estates, assembly plants for agricultural machinery, a clothing factory, and labour intensive undertakings producing craft and consumer goods.

The EEC is financing the infrastructure for the expansion of the existing Maseru industrial area and a new area at nearby Thetsane, to provide for ownership of small and medium size farms by Bathos as well as alternative employment opportunities for migrants. In 1976, a factory to assemble TV sets was opened. A brewery is being established by a Kenya company at a cost of M12 mn and will be the largest industrial enterprise in the country on completion, and a flour milling complex and shoe and knitwear factories are other new projects.

10. TRENDS IN INDUSTRIAL DEVELOPMENT

Largely through the efforts of LNDC, some manufacturing establishments were created or expanded in the first plan period. Most of the investments came from outside the country. Some groundwork was done for more accelerated progress in the second plan in the form of feasibility and design studies for various industrial possibilities (the abattoir, food processing, etc.) and a comprehensive survey to provide a general strategy for increasing manufacture output and employment.

Emphasis will be on building materials and construction, fibre processing and textile manufacturing, agriculture-based industries, and development of Basotho enterprise. It is expected that export industries will be larger in scope and provide more employment opportunities than import-substitution schemes because of the small size of the domestic market. Exports to Europe may become possible now that associate membership in the EEC has been negotiated, but the southern African market will not be neglected. Efforts will be concentrated mainly under the following programmes:

Trade, Crafts, Small-scale and Rural Industries: BEDCO will have funds for lending to entrepreneurs. Craft centres will be built as part of a rural development programme.

Foreign investment, Medium and Large-scale Operations: Foreign investment is to be encouraged. Present incentives for domestic and foreign investors will be reviewed and possibly revised. LNDC will continue to offer financial assistance through loans or equity participation in accordance with the investment policy of the Government.

Building Materials Industry: Lesotho has a large market and there appear to be good export prospects. There are substantial natural resources for the production of stone chips and gravel, concrete and sandstone products, and expanded clay products production. A building materials and construction industry will be promoted.

Handicrafts: Small-scale production will be promoted.

Furniture: Substantial investment will be needed, as well as assistance for improvement and expansion.

Expansion of LNDC-owned Industries: Some firms which started in the first plan period will expand, largely from their own retained profits, providing additional jobs.

Industrial Areas Extension: Maseru, Maputsoe, and Teyatoyaneng are to be expanded. A revolving fund for industrial areas will be established so that all future expansion will be paid out of the rents earned on land development.

The first five-year development plan (1970/71-1974/75) envisaged total public expenditure of M29 million of which about half was allocated to roads and agriculture. In real terms the plan target was 83% fulfilled. The second five-year plan (1975/76-1979/80) provides for government investment totalling M112 million; in addition there is provision for technical assistance worth M47 million. The plan aims at an average annual growth in the economy of 5%; 38% overall growth in agricultural output; the development of water and mineral resources; and the provision of 30,000 new jobs.

Development Plan 1975/80 (M million)	
Agriculture and rural development	36.4
Transport and communications	20.1
Industry, commerce and tourism	19.5
Social services	13.6
Education	11.9
Natural resources	1.1
Government services	8.9
Total	111.5

Source: Commonwealth Fact Sheet

Much bilateral aid is in the form of direct grants and technical assistance. Britain is still the major bilateral donor but Denmark, Canada, the United States, Sweden, Taiwan, Iran and West Germany are also important. New sources of bilateral aid include Eire, Japan and Nigeria. Multilateral agencies supplying aid and soft loans include the World Band, IDA, African Development in Africa. Lesotho, as one of the developing countries associated with the EEC through the Lome Convention, receives aid in cash and kind from the Community.

COUNTRY INDUSTRIAL PROFILE - MALAWI

Area Sq. Kms 118,484 Population 5.8 million

1. NATURAL RESOURCES

Electricity

The first stage of the Tedzani Project, two 8 mw sets, was commissioned in July 1973 which, together with the 24 mw Nkula hydro-electric station, will meet the power demands of the interconnected systems of the Southern Region and Lilongwe. With the completion of a barrage at Tedzani these machines will be up-rated to 10 mw each and, with the addition of thermal plant to the system, sufficient power will be available to meet forecast demands prior to the commissioning in 1977 of the second stage of the Tedzani Project, a further two 10 mw sets. The Electricity Supply Commission also operates stations at Mangochi, Mzuzu, Kasungu, Liwonde, Chikwawa and Salima. A total of 252.96m. kwh. were sold by the Electricity Supply Commission in 1976.

Minerals

The main product in 1976 was marble (149,254 tonnes) for the manufacture of cement.

Agriculture

Malawi is predominantly an agricultural country. Up to March 1977 519,300 of the rural population had been reached by self-help piped water projects, of which 427,700 were in the Southern region. In 1976 agriculture contributed 46.1% to the GDP, and agricultural produce accounted for over 79% of total exports. Of the total area of 23.3m acres, 13.1m could be cultivated and, in 1969, 3.36m were being cultivated, of which 2.64m were under maize. Maize is the main subsistence crop and is grown by over 95% of all smallholders. Almost all the surplus crops produced by smallholders are sold to the Agricultrual Development and Marketing Corporation. In 1976 the corporation purchased: Tobacco, K.6.03m.; groundnuts, K.5.38m.; maize, K.3.54m.; cotton, K.3.02m.; rice, K.2.42m.; pulses, K.1.9m.

Livestock in 1976: Cattle, 728,500; sheep and goats, 850,000; pigs, 190,000.

Forestry

In 1976 (estimate) 535,510 cu.ft of sawn timber were produced, valued at K.1.3m. The value of other forest products was K.536,986.

Fisheries

Landings in 1976 (provisional) were 80,800 short tons valued at K.8m.

2. PRINCIPAL CROPS

(production in '000 metric tons)

	1976	1977	1978
Rice (paddy)	42!	38!	43!
Maize	1,100!	1,200!	1,400!
Sorghum*	105	105	110
Potatoes*	88	89	89
Dry beans	11	5	5*
Groundnuts (in shell)	165!	100*	100*
Seed cotton	22	27	31!
Cottonseed	15	18	21!
Cotton (lint)	6	7	8!
Vegetables*	184	186	189
Fruit*	209	209	213
Sugar cane*	950	980	980
Tea (made)	28	31	32!
Tobacco (leaves)	37	52	56!

* FAO estimate ! Unofficial estimate

Source: FAO, Production Yearbook

3. LIVESTOCK PRODUCTS

(FAO estimates, '000 metric tons)

	1976	1977	1978
Beef and veal	10	10	11
Goats' meat	3	3	3
Pig meat	8	11	11
Poultry meat	7	8	8
Cows' milk	31	35	36
Hen eggs	9.6	9.9	10.2

Source: FAO, Production Yearbook

4. INDUSTRY - SELECTED PRODUCTS

		1974	1975	1976	1977
Raw sugar	'000 metric tons	47	69	87	95
Beer	'000 hectolitres	345	472	458	479
Cigarettes	million	567	670	541	487
Blankets	'000	861	755	n.a.	n.a.
Cement	'000 metric tons	82	104	85	94
Electric energy	million k Wh.	235	295	318	331

Radio receivers: 32,000 (1972)

Source: mainly UN, Statistical Yearbook

5. MAIN COMMODITIES TRADED

IMPORTS	1976	1977
Piece goods	5,208	8,028
Other garments	948	1,740
Passenger cars and motor cycles	2,642	3,336
Commercial road vehicles	4,934	4,900
Medical and pharmaceutical goods	3,447	3,597
Dairy products	2,358	2,586
Agricultural machinery	5,133	3,389
Printed matter and stationery	1,040	1,752
Footwear	642	913
Petrol	7,865	8,803
Diesel fuel	10,298	11,001
TOTAL (incl. others)	188,469	211,795

EXPORTS	1976	1977
Tobacco	64,930	86,605
Tea	26,431	41,637
Sugar	23,204	18,454
Groundnuts	11,243	8,866
Raw cotton	2,348	2.441
Beans and peas	1,578	3,286
Rice	1,521	2,484
TOTAL (incl. others)	141,039	176,113

6. DETAILS OF IMPORTS

	1975	1976	1977	1978	1979
By end use					
Consumer goods	30.5	22.4	1.4	35.9	48.3
Plant, machinery & equipment	26.9	28.5	28.9	58.9	46.1
Transport means	35.2	26.2	22.7	38.6	41.7
Materials for building & construction	16.8	19.5	16.5	23.7	27.0
Basic & auxilliary materials for industry	78.2	62.0	62.1	74.7	90.3
Commodities for consumption	28.0	29.0	34.1	38.2	60.3
Total (incl. others)	216.6	188.5	209.8	285.2	328.0

Sources: Economic Report 1979; Monthly Digest of Statistics

7. DETAILS OF EXPORTS

a. Quantity of Agricultural Exports, 1973-1975

(in thousands of metric tons)	1973	1974	1975
Tobacco			
Burley	4.4	4.0	n.a.
Virginia Flue-cured	7.0	7.9	n.a.
Virginia Dark.Fired/Sun-cured	12.8	10.7	n.a.
Other Tobaccos	3.2	4.7	n.a.
Total Tobacco	27.5	27.4	32.5
Groundnuts	27.4	20.7	21.8
Maize	36.3	31.0	-
Cotton Fibre	2.5	2.5	2.1
Pulses	6.8	4.1	5.1
Cassava	27.8	5.7	8.0
Rice	14.3	11.1	5.4
Coffee	0.2	0.2	..
Sunflower Seed	3.0	4.9	2.9
Tung Oil	0.8	0.6	0.5
Tea	22.7	23.8	24.9
Sugar	18.0	23.1	31.2

.. less than 500 metric tons

Source: National Statistical Office

Details of Exports (continued)

b. Composi.ion of Exports by Main Commodities

(in millions of Kwacha)	1974	1975	1976 (est)
Smallholder crops	31.9	32.7	47.4
Tobacco	15.1	19.4	29.4
Groundnuts	5.2	6.5	11.3
Cotton	2.7	1.9	2.3
Rice	3.0	1.5	1.6
Other	5.9	3.4	2.9
Estate crops	50.8	65.9	80.0
Tobacco	24.1	31.7	35.8
Tea	17.2	21.7	26.6
Sugar	9.2	12.3	17.3
Other	0.3	0.2	0.3
Manufactured goods and other exports	6.8	7.7	8.4
Total Domestic Exports	89.5	106.3	135.8
Re-exports	11.8	15.8	10.6
Total export	101.3	122.1	146.4
Valuation and coverage adjustment	-2.0	-2.4	-
Total Exports f.o.b.	99.3	119.7	146.4

Source: National Statistical Office

8. PRINCIPAL COMMODITIES

Malawi - manufacturing sector 1975 (K'000s)

	Industries	Goods Sold		
		Total	For Export	Exports as % of Total
1	Food processing	23,254.2	12,129.9	52.2
2	Bakeries and Confectionery	5,798.9	-	-
3	Beverages	12,668.1	-	-
	TOTAL FOOD (excl. Tea & Tobacco)	41,721.2	12,129.9	29.1
4	Ginning, Spinning, Weaving Blankets, Towels etc.	12,965.4	306.2	2.4
5	Knitting Mills, Ropes & Netting	925.3	244.4	26.4
6	Clothing	8,099.4	1,564.7	19.3
7	Leather and Footwear	1,648.1	81.8	5.0
	TOTAL TEXTILES AND LEATHER	23,628.2	2,197.1	9.3
8	Sawmills & Wooden Articles	3,034.2	121.6	4.0
9	Wooden Furniture	685.4	42.6	6.2
	TOTAL WOOD & WOOD PRODUCTS	3,719.6	164.2	4.4
10	Paper Products	3,428.4	45.5	1.3
11	Printing and Publishing	4,338.3	11.5	0.3
	TOTAL PAPER AND PRINTING	7,766.7	57.0	0.7
12	Ind. Chemicals, Fertilizers & Paints	5,446.7	28.5	0.5
13	Drugs, Cleaners, Cosmetics	11,688.9	775.7	6.6
14	Matches, Tyre Retreading	2,378.7	-	-
15	Plastic Products	763.0	14.0	1.8
	TOTAL CHEMICALS	20,277.3	818.2	4.0
	TOTAL NON-METALLIC MINERALS	4,863.4	-	-
16	Tools, Metal Furniture, Structural Metal Products	2,433.3	276.5	11.4
17	Fabricated Metal Products			
18	Elec. & Non-Elec. Mach. & Equipment	4,725.8	211.5	44.7
19	Motor Vehicle Assembly	2,833.9		
	TOTAL METAL PRODUCTS MACHINERY TRANSPORT AND EQUIPMENT	11,085.3	2,414.0	21.8
	GRAND TOTAL (excl. Tea & tobacco)	113,071.7	17,780.4	15.7
20	Tea Processing	22,096.3	13,460.2	61.0
21	Tobacco processing	24,680.6	19,927.4	80.7
	GRAND TOTAL MANUFACTURING	159,848.6	51,188.0	32.0
	MEMO: FOOD INDUSTRIES incl. Tea & Tobbacco	88,498.1	45,537.5	51.5

Source: Annual Economic Survey 1974-1975

9. MANUFACTURING

Industry

Manufacturing output is estimated to have increased 3.0 per cent in 1979 - compared to 10.9 per cent in 1978, causing manufacturing's contribution to GDP to drop from 11.8 to 6.3 per cent.

Most industries come under the heading of agricultural processing. They include tea factories, cotton ginneries, tobacco factories, sawmills and plywood, oil and grain mills, and abbattoirs and cold storage plants. Besides these Lever Bros (Malawi) Ltd makes a range of soaps, detergents, glycerines and animal feed, and cement is produced by the Portland Cement Company at Blantyre. There is a shoe plant, a match factory, a gin disillery and two tyre retreading plants. The government, through the agency of Press Holdings Ltd, controls a significant and growing part of the commercial sector. Special attention is being paid to the establishment of small scale industries.

The Malawi Development Corporation (MDC) is increasing the government's share of the commercial sector. Its aims are described as being to create employment and develop local skills while making a modest profit on its investments. Its share capital was K3.7 mn in 1977. Total investments amounted to K18.9 mn at the end of 1977. Its main interests are in construction (K7.1 mn), food and beverages (K2.1 mn), and wholesaling and retailing (K1.4 mn). MDC has a number of subsidiaries, including the Import and Export Co, and participates extensively with private industry. It has a 51 per cent share of the Carlsberg Malawi Brewery, which has a capacity of 50 mn bottles a year. A commercial link has been established with the Bank of America, which in 1973 provided MDC with a loan of K4.24 mn. As a consequence it has now acquired an equity stake in the Commercial Bank of Malawi and is supplying management expertise. The MDC borrowed $4.5 mn from Citibank in 1977 to implement its programme which includes battery manufacture at Nzeru Radio, hoe manufacturing and the new Mzuzu hotel. In 1978 the Malawi Iron and Steel Corp was formed at an estimated cost of K1.2 mn.

Investment in new industries continues to drop. In 1979 new industrial licences were granted, involving a prospective investment of K1.45 mn, considerably lower than the K82 mn record of 1977. Lilongwe is now the focus of industrial development as the industrial plots in Blantyre have all been used.

Index of Manufacturing Output

(1970=100)	1975	1976	1977	1978	1979[a]
Industry					
Food, beverages & tobacco	225.7	238.6	259.9	274.4	275.1
Footwear, clothing & textiles	130.2	109.9	126.2	148.2	192.8
Other					
Intermediate goods (mainly building & construction)	189.3	128.6	142.9	166.8	179.2
Export industries	154.0	172.3	207.3	217.1	218.4
Total	180.0	178.3	199.1	220.8	227.5

a Estimates

Source: Economic Report 1980

Investment and Employment in New Enterprises 1974/79

	Licenses granted	Investment (K mn) Domestic	Foreign	Total	Employment	Capital labour ratio (K/per job)
1974	18	2.9	1.1	4.0	770	5,200
1975	11	0.7	1.3	2.0	200	10,200
1976	11	1.9	0.4	2.2	218	10,234
1977	15	...	...	82.3	5,293	
1978	22	...	...	15.3	2,723	5,619
1979	14	...	...	1.5	543	2,670

Source: Economic Report 1979

10. TRENDS IN INDUSTRIAL DEVELOPMENT

Rapid expansion of a very limited industrial base, accorded high priority at independence, boosted estimated manufacturing output by an average of 13 per cent a year between 1964 and 1973. This growth rate has since fluctuated but in 1978 was about 8.7 per cent. Although many import-substitution type industries have reached a ceiling, export-oriented industries are growing steadily and, for the manufacturing sector in general, long-term prospects look good. Government encouragement of private enterprise has led initially to the attraction of foreign private direct investment and management expertise, especially in collaboration with the wholly government-owned Malawi Development Corporation (MDC), established in 1964 to promote new enterprises through participation in their equity and loan finance.

Total MDC investments in subsidiary and associated companies, covering construction, manufacturing, distribution, hotels and tourism, commercial fishing and agricultural estates, finance and property amounted to an estimated K19.4 million at the end of 1978. Inaugrated as a statutory corporation, the MDC became a limited liability company at the beginning of 1970 and continued to generate a surplus for reinvestment in the group's activities. A favourable investment climate has been created through a good record of political and monetary stability and infrastructural development.

Direct inducements have been offered in the form of low-cost estate sites, tariff protection, exclusive licensing where justified, generous investment allowances, and unrestricted repatriation of capital, profits and dividends. Fifteen new industries were granted licences in 1977, involving prospective investments of K82.3 million. Apart from the traditional export industries of tea and tobacco manufacture, important new categories include: milling; manufactured sugar and other foods; beer, spirits and soft drinks; textiles, clothing and footwear; meat, fish, fruit and vegetable canning; oils and soaps; radios and batteries; cement and bricks; sawmilling and timber processing; industrial gases; blankets; paper products; plywood; plastic pipes; agricultural implements; cosmetics; railway equipment; rough and cut gemstones; domestic electrical appliances; galvanised steel sheeting; fishing flies. Nearly 6,000 new jobs were expected to be created in manufacturing in 1978. The Import and Export Company of Malawi, a wholly-owned subsidiary of the MDC, was set up in 1971 to improve the distribution network for the benefit of rural communities throughout the country. Wholesale and retail outlets were acquired from Bookers (Malawi) Ltd. until then predominant in this sphere, with objective of eventual Malawianization of rural retail trading.

Deposits of a number of minerals, including bauxite, asbestos and graphite, have been found in Malawi but none has yet been commercially exploited to any great extent. The most important find has been the bauxite reserves in the Mulanje areas, believed to amount to nearly 29 million tons of ore and containing an average of 43.9 per cent alumina. However, to exploit the bauxite and transport it from this remote area would involve enormous costs although it might become feasible when Malawi's hydro-electric capacity is increased sufficiently to supply the large quantities of power required for bauxite smelting.

The new five-year development plan (1981/2 to 1985/6) emphasises the development of export-oriented agro-based industries during the 1980s. A new project to produce ethanol from molasses (using the molasses from the Dwango sugar mill) costing 68.7 million, should start production in late 1981.

Studies are at present under way for the manufacture of glass, calcium carbide and fertilizers by electrolysis. There is a plan to realise a 75 MW hydro-electric power station at Nakula by the end of 1981. It will involve a capital investment of $ 50 million in hardware and $50 million in civil engineering works.

The following projects are under investigation and the investment magnitude is listed:

edible oils	investment	required	32.5	mn
molasses by-product	"	"	8.7	
leather	"	"	1.2	
rubber	"	"	6.3	
fuel alcohol	"	"	1.8	
wood resources (saw milling, plywood, particle board)	"	"	7.9	
malathion	"	"	2.3	
polypropylene bags	"	"	2.3	

COUNTRY INDUSTRIAL PROFILE - MOZAMBIQUE

Area: Sq. Kms 784,961 Population (1978) 11 million

1. NATURAL RESOURCES

Cereals	(1974)	901,000
Tea	(1974)	18,795
Tobacco	(1974)	7,000
Cotton Fibre	(1973)	35,308
Rice	(1972)	100,000
Maize	(1972)	430,000
Bananas	(1972)	66,000
Sisal	(1972)	24,000
Cattle	(1972)	1,355,613
Goats	(1972)	568,330
Sheep	(1972)	129,604
Pigs	(1972)	178,558
Asses	(1969)	18,981

2. PRINCIPAL CROPS

('000 metric tons)

	1976	1977	1978
Maize	450*	350*	400*
Copra	83*	80x	75x
Sugar cane x	2,500	2,100	1,700
Bananas x	36	36	36
Cashew nuts	95*	180*	150x
Cotton lint	18*	22*	26*
Tea*	13	14	18
Sisal*	19	18	18
Rice (paddy)*	45	35	35

* Unofficial figures x FAO estimates

Source: FAO, Production Yearbook

3. LIVESTOCK PRODUCTS

('000 metric tons)

	1976	1977	1978
Beef and veal	35	36	37
Goats' meat	1	1	1
Pigs' meat	7	7	7
Poultry meat	17	18	18
Cows' milk	60	60	60
Goats' milk	7	7	7
Hen eggs	8.8	9.2	9.6
Cattle hides	5.9	6.0	6.1

Source: FAO, Production Yearbook

4. INDUSTRY-SELECTED PRODUCTS

		1974	1975	1976	1977
Wheat flour	'000 metric tons	81.6	70.6	65*	n.a.
Raw sugar	" " "	300*	260*	220*	320
Tea (made)	" " "	17.6	13.1	13.8	17.0*
Margarine	" " "	1.5	n.a.	n.a.	n.a.
Beer	'000 hectolitres	823	691	655	n.a.
Cigarettes	million	2,696	2,800x	3,000x	3,100x
Cotton yarn	'000 metric tons	4.2	n.a.	3.4	n.a.
Woven cotton fabrics	" " "	3.5	n.a.	n.a.	n.a.
Jute fabrics	" " "	5.8	n.a.	n.a.	n.a.
Motor spirit (petrol)	" " "	70.7	62.8	65	65*
Distillate fuel oils	" " "	126.9	94.9	82	90*
Residual fuel oils	" " "	241.3	172.5	173	170
Cement	" " "	465.1	258	217	220*
Electric energy	million kWh.	747*	658*	1,915*	4,940*

* Estimates x Source: U.S. Department of Agriculture

Source: mainly UN, Statistical Yearbook

5. MAIN COMMODITIES TRADED

(million escudos)

IMPORTS	1975	1976	1977	EXPORTS	1975	1976	1977
Machines & Electrical Equipment	2,064	1,661	1,748	Textiles ..	667	654	433
Transport Equipment	730	553	1,046	Cashew Nuts	1,221	1,049	1,468
Base Metals & Products	1,018	683	937	Raw Cotton ..	439	533	289
Textiles	1,129	922	1,397	Sugar	575	537	260
Crude Oil	652	933	1,033	Vegetable Oils	215	139	176
Wheat	621	636	293*	Wood	383	192	158
Paper Products ..	352	222	303	Tea	177	200	410

* Figures for Wheat incomplete

6. DETAILS OF IMPORTS

Commodity Description	Quantity	
	Estimate	Unit
Live Cattle	-	
Meat of bovine animals	-	
Coffee	100	Tons
Canned meat	-	
Canned fish	-	
Fish flour	4 500	Tons
Raw tobacco (Virginia)	500	Tons
Prepared glue	35 000	Tons
Insecticides	-	
Printing paper	-	
Craft paper	-	
Printed cotton material	16 200	bales
Synthetic clothes	-	
Refractory bricks	-	
Copper wires	-	
Copper tubes	-	
Aluminium sheets	50	Tons
Aluminium cables	-	

7. DETAILS OF EXPORTS

Commodity Description	Unit	Estimated Quantity
Condensed milk	Tons	2,868
Cashew nuts		-
Copra oil		-
Preparation of fruits	Tons	5
Tobacco burley		-
Raw or sawed marble		-
Cement	Tons	115,242
Coal mineral	Tons	35,088
Asphalt		-
Paints		-
Matches		-
Wood boards		-
Sawed wood (not specified)	Tons	53
Wood beams		-
Finished parquet		-
Sisal ropes and twins	Tons	1,848
Mosquito and chicken nets (elastic, iron or copper or metallic)	Tons	2,662
Garments	pieces	220,000
Shoes	pairs	500,000
Cement pipes and sheets		-
Glasses, bottles	pieces	59,375
Steel or iron sheets	Tons	5.2
Steel or iron pipes		-
Barbed wires		-
Nails and screws	Tons	200
Taps and valves		-
Welding electrodes	Tons	200
Refrigerators	Units	4,000
Batteries	Pieces	2,500
Lamps		-
Bicycles		-
Trailers		-
Furniture - wood, metal		-

8. PRINCIPAL COMMODITIES

Production of Minerals

(tons)	1973	1974	1975	1976
Bauxite	5,184	2,405	-	-
Bentonite	3,844	1,793	-	-
Beryl	1	8	-	-
Coal	394,195	425,841	575,000	371
Columbo-tantalite	29	40	-	-
Copper ore	3,400	1,400	2,500	2,000
Granite	404,030	963,092	-	-
Kaolin	175	-	-	-
Limestone	1,058,643	682,190	-	-
Microlite	56	53	-	-
Sea salt	27,680	41,825	31,000	31,000
Semi-precious stones	6	3	-	-

Sources: Anuario do Estado de Mocambique, 1974-75; Boletim Mensal de Estatistica. UN Statistical Yearbook

Primary Commercial Energy Balance, 1978

('000 tons coal equivalent)

Production		Consumption	
Solid fuel	500	Solid fuels[b]	700
Hydroelectricity[a]	2,963	Liquid fuels[bc]	712
Total production	3,463	Hydroelectricity[a]	2,963
		Less net exports of electricity[a]	2,658
Imports		Total consumption	1,717
Solid fuel	250		
Crude petroleum	617		
Petroleum products	286	**Exports**	
Electricity[a]	382	Solid fuels	50
Total imports	1,535	Petroleum products	16
		Hydroelectricity	3,040
		Total exports	3,106
		Bunkers	113
		Balancing item[d]	62
Total supply	4,998	Total demand	4,998

a The UN converts primary and internationally traded electricity from kwh to coal equivalent on an output basis, showing the heat energy that may be obtained from it under ideal conditions. It has been converted here on an input basis, showing the amount of energy a thermal power station of average (28 per cent) efficiency would require to produce the same amount of electricity.

b Apparent consumption, assuming nil stock changes

c Including refinery consumption.

d Comprises estimated output of non-energy petroleum products (18,000 tons of bitumen) and changes in crude petroleum stocks.

Source: UN World Energy Supplies 1973-78

9. MANUFACTURING & TRENDS IN INDUSTRIAL DEVELOPMENT

Before independence, the secondary sector accounted for 10 per cent of GNP. Manufacturing activity is confined to consumer goods for the domestic market, processing the main export crops (cashew nuts, sisal, cotton, sugar, tea) and an oil refinery. According to Associacao Industrial de Mocambique, in 1970 about 6.3 bn escudos were invested in consumer goods industries, which represented 49 per cent of industrial investment. They employed 43,500 people and production totalled 6.16 bn escudos. Amongst major consumer goods industries are cigarette factories, breweries, clothing and textile factories, grain mills and three cement plants. The main agricultural processing industries are sugar, tea and cashew nuts.

About 47 per cent of Mozambique's manufacturing industries are located in Maputo. This strong concentration is partly accounted for by the high purchasing power derived from services to the hinterland, specifically: port revenues, miners' remittances, and until recently, earnings from tourism. Most of the industries are consumer goods industries, which tend to favour market-side location. There are some industries favouring port-side location, e.g. imported crude oil for the oil refinery, imported sulphur for the sulphuric acid plant, imported phosphates for the fertiliser complex. Maputo also has several agricultural processing industries; agricultural produce grown in northern Mozambique is transported to Maputo, where it is processed in the factories. However, decentralisation is being sought by encouraging new industries to be located in northern towns like Pemba, Nampula and Mocuba.

These manufacturing industries which have been nationalised after being abandoned by their former owners are being taken over by workers and run as collectives.

Production of Selected Manufactures

('000 tons)

	1973	1974	1975	1976	1977	1978
Tea	17.2	19.2	...	...	...	...
Sugar	293.6	265.6	...	...	...	...
Rice	50.6	47.9	...	...	...	...
Cashew nuts	29.2	24.6	...	...	...	...
Cotton textiles	3.3	3.5	...	...	...	
Cotton yarn	3.2	4.2	...	...	...	
Diesel oil	166.5	126.9	...	...	...)	
Fuel oil	336.7	241.3	...	...	...)	623.0
Gasoline	119.9	70.7	...	...	...)	
Cement	611.0	465.0	...	...	322.0	531.0

Source: Boletim Mensal de Estatistica; Noticias

COUNTRY INDUSTRIAL PROFILE - SWAZILAND

Area Sq. Kms 17,363 Population (1978) 0.54 million (estimated)

1. NATURAL RESOURCES

Minerals

Swaziland produced a large tonnage of iron ore from the Ngwenya mine near Mbabane (but mining has now ceased) and asbestos from the Havelock Mine (39,300 tons in 1976). Coal is mined at Mpaka (126,000 tons in 1976). Small quantities of quarry stone, kaolin, barytes and pyrophyllite are also mined. Total mineral production was valued in 1968, R18,277,300.

A railway has been built from the Ngwenya haematite deposits to Goba, in Mozambique, chiefly for the transportation of iron ore. The Swaziland Iron Ore Development Company had entered into a contract to supply Japanese buyers with 14.5m tons of ore over 10 years; first shipments began in Nov. 1964. The extensive deposits of low-volatile bituminous coal in the Lowveld are being worked to provide coal for the railway, sugar-mills and export.

Agriculture

Some 56% of the country, which covers 4,290,944 acres, is reserved for occupation by the Swazi. The main crops are sugar, citrus and rice, all of which are grown under irrigation, and cotton, maize (the staple product), sorghum, tobacco and pineapples. It is usually necessary to import maize. Sugar, first produced in 1958, and wood-pulp and other forest products are the two main agricultural exports (worth E70.2m, and E12.5m respectively in 1975).

Livestock (1976): Cattle, 600,000; goats, 300,000; sheep, 35,000; poultry, 600,000.

2. PRINCIPAL CROPS

('000 metric tons)

	1976	1977	1978
Rice	5	5*	5*
Maize	97	85	90
Potatoes	9	6*	6*
Sweet potatoes	10	9*	9*
Seed cotton	18*	18*	18*
Cottonseed	12*	12*	12*
Citrus fruit	74	85*	80*
Other fruit	19	19*	21*
Sugar cane	1,929	1,992*	2,240*
Cotton lint	6*	6*	6*

* FAO estimates

Source: FAO, Production Yearbook

3. LIVESTOCK

('000 numbers)

	1976	1977	1978*
Cattle	634	634	640
Goats	237	258	260
Sheep	31	31	32
Horses	2	2	2
Donkeys	14	13	13
Poultry	522	514	550
Pigs	19	20	21

* FAO estimates

Source: FAO, Production Yearbook

4. INDUSTRY-SELECTED PRODUCTS

		1974	1975	1976	1977
Tinned Meat	metric tons	860.4	331.5	290.1	800.9
Raw sugar	'000 metric tons	194	212	209	225
Molasses	" " "	57.4	62.8	65.8	70.2
Chemical wood pulp*	" " "	143	143x	141	152
Electric energy	million kWh.	126	112	144	123

* Twelve months ending June 30th of the year stated. x FAO estimate.

5. MAIN COMMODITIES TRADED

('000 emalangeni)

IMPORTS	1975	1976	1977
Food & live animals	11,397	14,056	16,051
Beverages & tobacco	6,545	7,990	7,950
Crude materials (inedible) except fuels	858	1,186	1,132
Mineral fuels, lubricants, etc.	13,766	18,935	23,662
Animal & vegetable oil and fats	561	478	621
Chemicals	11,878	12,932	15,666
Basic manufactures	14,498	18,148	19,713
Machinery and transport equipment	34,270	53,719	39,003
Miscellaneous manufactured articles	12,863	15,816	17,261
Commodities not classified by kind	24,956	30,824	53,751
TOTAL	131,592	174,084	194,810

EXPORTS (excluding re-exports)	1975	1976	1977
Sugar	80,040	54,507	53,247
Citrus fruit	4,464	4,851	7,585
Iron ore	11,944	12,147	9,055
Wood pulp	12,445	29,904	21,467
Asbestos	9,269	13,831	14,931
Canned fruit	3,585	4,976	5,722
Meat & meat products	1,649	4,486	4,005
Other	20,290	32,310	27,102
TOTAL	143,686	157,012	143,114

Source: Africa: South of the Sahara 1980-81

6. DETAILS OF IMPORTS

Commodity Description	Commodity Description
Fresh fish	Hydraulic quick or slaked lime
Dried, salted, smoked fish	Portland cement
Crustacean, lobsters	Petrol and aviation spirit
Roasted coffee	Diesel
Tea	Aviation Kerosene
Spices (ground or crushed)	Lubricating oils
Nuts (ground or crushed)	Chemicals
Prepared, preserved, smoked ancovys, sardines	Pharmaceutical products
Cocoa beans, raw	Pneumatic tyres
Chocolate containing cocoa	Machinery
Cigars	Motor vehicle components
Cigarettes	Binoculars
Snuff, pipe tobacco, chewing tobacco	Cameras
	Cinematographic (cine cameras)
	Clocks, watches, parts, and scientific goods

7. DETAILS OF EXPORTS

Commodity Description	Quantity	
	Value	Unit
Live cattle	4.6	E'000
Live chicken	179.8	"
Frozen meat	1 000	"
Processed chicken & other meat	-	
Processed vegetable	-	
Blood hooves and offal	-	
Vegetable oils	-	
Canned meat	84.2	"
Artificial honey	-	
Alcohol	-	
Liquor	-	
Maizebran (Hominy chop)	-	
Chrysotile asbestos	6 000	M.Ton
Coal	165 000	"
Tall oil	-	
Fertilizers	500	E'000
Paints	-	
Explosives	-	
Sawn Timber	41.1	"
Unbleached wood pulp	4 400	M.Ton
Paper (craft, newsprints)	-	
Clothing	0.4	E'000
Asbestos products	-	
Pottery	-	
Ceramics	30	"
Ornamental glassware	-	
Cutlery	30	"
Wick paraffin stoves	50	"
Pumps (submersible)	-	
Shawls	-	
Tinkabi tractors	200	units
T.V. sets	1 017.9	E'000
Radio and cassettes	-	
Furniture & knockdown furniture (wooden)	100	"
Zips	-	

8. PRINCIPAL COMMODITIES

('000 tonnes)

	1976	1977	1978
Raw sugar	214.6	226.0	243.4
Molasses	69.1	70.9	71.0
Tinned meat*	290.0	425.0	n.a.
Other meat products	5.6	5.4	n.a.
Sawn timber	64.4	62.5	59.7[x]
Electricity[xx]	144.0	123.0	n.a.

* tonnes

x estimate

xx million kWh, public supply

(tonnes)

	1975	1976	1977
Iron ore*	2,239,818	1,935,853	1,440,864
Chrysolite asbestos	37,595	39,327	38,046
Coal	126,872	126,140	128,990
Barytes	219	368	n.a.

* Gross weight

Source: Commonwealth Fact Sheet

9. MANUFACTURING

In 1976 ten major manufacturing and processing enterprises contributed approximately 15 per cent of Gross Domestic Product and employed 6160 persons, 1.2 per cent of the resident population. These figures do not include the contribution to GDP and employment of the primary agricultural and forestry industries which supply the processing enterprises. Significant developments in manufacturing and processing have taken place since the early 1960s, by which time 8 per cent (by number) of the enterprises now in operation were established. The Table below summarises the growth in the number of industrial enterprises:

ESTABLISHMENT OF ENTERPRISES WHICH ARE STILL IN OPERATION

	Before 1968	1968-1972	1973-1977	Total
Manufacturing and Processing	17	10	26	53
Construction	3	2	1	6
TOTAL	20	12	27	59

Source: Ministry of Industry, Mines and Tourism

The most rapid industrial development took place in the period 1973 - 1977. This is directly attributable to the formation of the National Industrial Development Corporation of Swaziland.

During 1976 turnover in manufacturing and processing amounted to about E128 million, of which approximately E108 million was accounted for by the ten largest companies.

The construction industry, which accounts for 4.8 per cent of GDP, has lagged behind other industrial activities, unable to keep pace with the demand of the domestic market. Most large-scale construction is still executed by foreign contractors but small-scale construction is being vigorously promoted by the Small Enterprises Development Company. Six major local companies and the Public Works Department employ about 2,300 people in construction activity. Small-scale Swazi contractors employ a further 380. If the labour force of foreign-based companies operating in Swaziland is included, a total of about 3,700 persons can be counted as being employed in construction.

10. TRENDS IN INDUSTRIAL DEVELOPMENT

One of the strategies of Swaziland's 1979 - 1983 plan is to increase the jobs available in industry and to develop industrial estates. The Government will also build a new fair ground near Matsapha and establish trade promotion organisations. Swaziland's industrial sector, apart from mining and sugar processing, is extremely small-scale. Most of it is likely to remain small-scale into the foreseeable future. Where practicable, it is intended to decentralize industry.

It is government strategy to establish industries based as far as possible upon processing local raw materials: for example, a mill is to be constructed to extract oil from cottonseed. there are plans for a brewery at a cost of E13m. New industrial estates are also planned.

The Government is now concentrating upon agricultural industries so as to further the use of the country's natural resources. In this connection typical ventures are a tractor project; a cottonseed oil expelling and ginning plant; and a tannery. A different kind of venture is a plant to produce high-quality tableware. Other projects include granulated fertilizer plant, textiles and the use of by-products from processed sugar. NIDCS is extending the industrial estate at Matsapha and providing further public services for the smaller towns and the rural areas.

The industrial sector (manufacturing) of the economy remains small and much of its impetus comes from injections of aid. In 1981, for example, the EIB provided 3m ECUs to be used for small and medium-sized industrial, agricultural business and tourist enterprises. The money was provided through the NIDCS and 2m ECUs were for the cottonseed oil project to which the government attachs high priority. A further 1m ECUs were designated for pre-investment studies as well as for several specific loans.

There is great imbalance between manufactured products which go for export and the proportion of manufactures which have to be imported. In 1975 only 1 per cent of all exports (valued at E1m) were exported while two thirds of all imports, then valued at E90m, were manufactured goods. Though the balance has changed slightly during the latter half of the 1970s it has not changed substantially.

There is a new industrial centre being developed in the south at Nhlangano. It is concentrating upon food processing industries, cement, chemicals and fertilizers and textiles.

Manufacturing contributes 33 per cent to GDP, although this figure includes sugar milling and the wood pulp business - two major activities that form part of the much more important primary products sector of the economy. After these come cotton ginning and the fruit canning industry; pineapples and then orange and grapefruit juices. A high proportion of all manufacturing activity is in the food processing business: meat canning, beverages, brewing, confectionery and packaging. Other manufactures are cement, textiles, garments, fertilizers, glues, detergents, paper and agricultural machinery.

Development will follow the line identified in the Third Development Plan, that is, textiles capacity, tanning, vegetable processing, vegetable oil production, sugar by-products, ceramics, asbestos processing, tractor project, glass works, and a variety of miscellaneous manufactures.

Based on the Third Development Plan and projecting a power station, the investment required is in the order of:

1.	Development Plan	U.S.$ 40 million
2.	Power station 60MW	U.S.$ 60 million

Allowing for slippages, the requirement over the next five years may be $ 70 - 80 million U.S. in 1981 dollars.

COUNTRY INDUSTRIAL PROFILE - TANZANIA

Area Sq. Kms 364,900 Population (1978) 17.5 million

1. NATURAL RESOURCES

Electricity

A hydro-electric station on the Pangani River near Tanga has been built; £3m. of its estimated cost of £5.2m. is being provided by the Commonwealth Development Corporation. Kidatu power-station in Morogoro region is nearing completion. Kiwira River power project, estimated to cost Sh.55m., was scheduled for completion in 1976. Electric power generated (1975) was 149.99 mw.

Minerals

The value of mineral exports in 1976 was Sh. 550m. Principal exports, 1977, were (in Sh. 1m.): Diamonds, 181.3; gold, 50.9; salt, 12; gemstones, 1.8. New discoveries of coal and iron ore were made in the south while copper, cobalt, nickel and tin deposits have been found in Western Tanganyika. Gas, at shallow depths, has been found off the coast.

Agriculture

Production of main agricultural crops in 1978 (in 1,000 tons) was maize, 200; sisal, 188; cotton, 151; sugar, 100; coffee, 44.9; wheat, 34.5; tobacco, 23. Production of sisal has been declining since 1967. The Tanganyika Sisal Corporation has embarked on a diversification programme by introducing various new crops. Crops already planned are cardamon, beans, cashew nuts, citrus, cocoa, coconuts, cotton, maize and timber. Cattle ranching, dairying and twine spinning have also been introduced.

Zanzibar provides the greater part of the world's supply of cloves. There are about 40,000 hectares under cloves with about 1.5m. trees; five-sixths of the clove output is produced on Pemba. Cloves and clove oil (distilled from the stems) form more than half Zanzibar's exports. In recent years cloves production has decreased from an average annual figure of 12,000 tons to 4,000 in 1974 but reached 10,000 tons in 1976.

The coconut industry ranks next in importance. There are about 5.5m. bearing trees in both islands. Chillies, cocoa, limes, other tropical fruits and coil tobacco are also cultivated. The chief food crops are rice, bananas, cassava, pulses, maize and sorghum.

Livestock (1978, including Zanzibar): 10m. cattle, 3m. sheep, 4.5m. goats, 22m. poultry.

Forestry

In 1973 work continued on planting new areas with hard-woods and soft-woods. Hard-woods could be planted in old sisal estates that are now reverting to bush.

Fisheries

A Fisheries Development Company is catching sardines and tuna for export. In 1976, 400 tons were exported valued at Sh. 3.5 m.

2. PRINCIPAL CROPS

(production in '000 metric tons)

	1976	1977	1978
Wheat	58	71	65*
Rice (paddy)	172	194	260*
Maize	897	968	1,000*
Sorghum	130*	150*	160*
Potatoes	260	240*	250*
Sweet potatoes*	330	345	343
Cassava (Manioc)*	3,900	4,000	4,076
Dry beans	146	153*	160*
Chick-peas	5	7*	8*
Groundnuts (in shell)	74	74*	74*
Castor beans!	2	2	2
Sunflower seed!	7	6	7
Sesame seed	6	7*	7*
Cottonseed!	129	99	108
Coconuts*	307	314	320
Copra*	27	27	27
Onions (dry)	37	40*	40*
Other vegetables	876	896	915
Sugar cane*	1,213	1,297	1,361
Citrus fruits*	33	35	38
Mangoes*	170	174	177
Pineapples*	45	46	47
Bananas*	770	790	803
Plantains*	770	790	803
Other fruit*	201	206	202
Cashew nuts	83.0	96.8	77.0!
Coffee (green)	55	49	42!
Tea	17	17!	20*
Tobacco (leaves)	15	19	18!
Sisal	105	105!	125*
Cotton (lint)	67	51!	56!

* FAO estimate ! Unofficial estimate

Source: FAO, Production Yearbook

3. LIVESTOCK PRODUCTS

('000 metric tons)

	1976	1977	1978
Beef and veal	121	126	131
Mutton and lamb	11	12	12
Goats' meat	19	19	19
Poultry meat	24	24	25
Other meat	7	7	7
Cows' milk	683	700	728
Goats' milk	48	50	50
Butter	2.7	2.9	3.0
Hen eggs	20.9	21.1	21.4
Other poultry eggs	2.5	2.5	2.6
Cattle hides	27.7	28.7	29.7
Sheep skins	2.3	2.3	2.3
Goat skins	3.1	3.1	3.1

Honey (unofficial estimates, '000 metric tons): 7.5 in 1976, 8.0 in 1977, 8.5 in 1978.

Source: FAO, Production Yearbook

4. INDUSTRY - SELECTED PRODUCTS

	1974	1975	1976	1977	1978
Cement ('000 tons)	297	266	244.3	246.3	272
Textiles (mn sq m)	86.4	87.4	82.7	77.2	83.4
Cigarettes (mn)	4,649	3,561	3,625	4,064	4,359
Beer ('000 litres)	63.7	59	69.5	75.1	85.8
Canned meat (tons)	4,740	2,193	1,943	580	764
Petroleum (tons)	753,000	669,000	746,423	610,586	590,000
Iron sheets (tons)	26,000	25,617	25,943	27,506	30,183
Sisal twine (tons)	29,496	25,492	28,601		
Pyrethrum extract (tons)	148	189	138		
Fertilizer (tons)	n.a.	59,327	42,146		
Shoes ('000 pairs)	n.a.	2,700	3,689		

Source: Bank of Tanzania

5. MAIN COMMODITIES TRADED

(Shs mn)

IMPORTS	1977	1978
Food, beverages & tobacco	636	558
Mineral fuels	895	1,438
Machinery	1,587	2,557
Metals	607	956
Transport equipment ..	715	1,288

EXPORTS	1977	1978
Coffee ..	1,857	1,303
Cotton ..	540	419
Diamonds ..	181	206
Sisal	228	212
Cloves ..	244	59
Cashew nuts ..	273	229
Tea	180	...
Tobacco ..	212	300

Source: Bank of Tanzania

6. DETAILS OF IMPORTS

Commodity Description	Quantity Estimate	Quantity Unit
Poultry, one day old chicks		
Malt (including malt flour)	75 000	QNT.
Starches and inulin		
Pyrethram extracts		
Fixed vegetable oils		
Fatty acids. Acid oils from refining		
Sugar raw		
Bakers yeast and household yeast	4 000	Tons
Milk foods specially prepared for infants	3 000	Tons
Sulphur other than sublimed precipitated or colloidal sulphur		
Marble	100	QNT.
Quicklime, slacked lime and hydraulic lime		
Hydrochloric and chlorosulphic acid	11	Tons
Sulphuric acid	1 000	QNT.
Caustic soda (Sodium hydroxide)	40 000	QNT.
Sodium carbonate (Soda ash)	20 000	QNT.
Sodium silicate	10 000	QNT.

Details of Imports (continued)

Commodity Description	Quantity Estimate	Unit
Carbide	2 000	Tons
Vaccines	2	Tons
Medicaments, drugs		
Other pharmaceuticals n.e.s.		
Ammonium sulphate nitrate	200	Tons
Sulphate of Ammonia	6	Tons
Urea containing not more than 45% of Nitrogen	500	Tons
Synthetic Tanning materials	4 000	QNT.
Medicated soap	5 000	
Disinfectants (including sheep and cattle dressing)	4 000	QNT.
Insecticides	50 000	QNT.
Fungicides	5 000	QNT.
Weed killers	2 000	QNT.
Natural rubber	40 000	QNT.
Synthetic rubber	25 000	QNT.
Tyres for tractors, bull-dozers, graders	3 000	QNT.
Cement for building purposes	60 000	Tons
Cement clinker		
Ores and concentrates of copper	4	Tons
Ores and concentrates of iron	15	Tons
Ores and concentrates of zinc	100	Tons
Petroleum, crude	600 000	Tons
Aviation spirit	533 060	Lits.
Motor spirit	21 600	Lits.
Jet fuel	88 000	Lits.
Lamp oil and white spirit	2 017 336	Lits.
Distilate fuels, heavy	319 992	Lits.
Lubricating oil	7 592 170	Lits.
Lubricating greases	5 000	Lits.
Non-lubricating oils	31 170	Lits.
Petroleum jelly	4 000	QNT.
Petroleum asphalt and bitumen	32.5	Tons
Asbestos sheets	500 000	Sheets
Tiles of ceramic and P.V.C.	5 000 000	Pieces
Roofing tiles	2 000 000	No
Sinks, wash basins	6 200	No
Iron and steel wire for manufacture	800	Tons

Details of Imports (continued)

Commodity Description	Quantity	
	Estimate	Unit
Galvanized barbed wire	300	Tons
Mosquito gauze	5 000	Rolls
Hexagonal wire netting	5 000	Sheets
Wire nails	100	Tons
Sanitary fittings	30 000	Pieces
Locks and padlocks and parts thereof	204 388	Dozen
Electric lamps and bulbs	4 500 000	No
Tyres for road motor vehicles	2 000	QNT.
Tubes for road motor vehicles	5 000	No
Tubes for tractors, bull-dozers, graders	500	QNT.
Plywood and veneer panels	100 000	Sq. mts
Newsprint papers	30 000	QNT.
Paperboard, simply finished	30 000	QNT.
Fibreboards and building boards	100 000	Sq. mts
Paper and paperboards	1.4	Tons
Sanitary towels		
Tents and tarpaulin		
Footwear - gum boots	25 000	Pair
Welding electrodes	200	QNT.
Exhaust pipes and silencers		
Electric refrigerators	4 000	No
Kerosene refrigerators	2 000	No
Agricultural machinery	5 000	No
Motor vehicle batteries	10 000	Number
Medical instruments	60 000	Number

7. DETAILS OF EXPORTS

Commodity Description	Quantity Estimate	Quantity Unit
Meat of bovine animals (canned beef)	20 000	QNT.
Fish	100	Tons
Crustacean and Molluscs (prawns, lobsters, crabs, etc.)	2 000	QNT.
Natural Honey	3 000	QNT.
Coral and shells and their waste	5 000	QNT.
Cashewnuts, raw	5 000	Tons
Cashew Kernels	5 000	Tons
Coffee	5 000	Tons
Instant Coffee	500	Tons
Tea	10 000	QNT.
Blended Tea	400	Tons
Cloves	1 000	QNT.
Cardamons	2 000	QNT.
Mangrove bark	5 000	QNT.
Vegetable oils, e.g. coconut oil, OK, Super Ghee etc.	5 000	Tons
Bees wax	6 000	QNT.
Sugar, refined	50 000	Tons
Cocoa beans	6 000	QNT.
Fruit and vegetable juices	10 000	QNT.
Alcoholic beverages e.g. Konyagi, Brandy, Africoco	50 000	litres
Unmanufactured tobacco	2 000	Tons
Cigarettes	200 000	Kg
Common salt	100 000	QNT.
Wattle extract for Tanning	10 000	QNT.
Soap and toilet preparations e.g. Gardenia, Mbuni, Soap detergents)	30 000	QNT.
Safety Matches	65 000	100 containers
Insecticides	3 000	QNT.
Plastic materials (Products)	20 000	Tons
Tyres for road motor vehicles	300 000	No
Tubes for road motor vehicles	300 000	No
Leather of the Bovine cattle, dressed	20 000 000	Sq. mt.
Handbags and travel goods	150 000	No
Poles, Piling, Posts and other wood in the rough, N.E.S.	400 000	No
Lumber, Planed, Tongued, Grooved etc.	2 000	Cu. mt.

Details of Exports (continued)

Commodity Description	Quantity Estimate	Unit
Plywood and veneer panels	200 000	Sq. mts
Fibreboards and building boards	12 000	Sq. mts
Sheep's and lamb's wool	500	QNT.
Raw cotton	10 000	Tons
Cotton waste, not carded or combed	300	QNT.
Cotton yarn	3 000 000	Kg
Sisal fibre	10 000	Tons
Sisal tow	5 000	Tons
Sisal Flume Tow	1 000	Tons
Cordage, cable, rope, twine of sisal	50 000	QNT.
Vests, T-shirts, Sports shirts	250 000	No
Cardigans, jumpers and pullovers	100 000	No
Printed cotton fabrics	30 000 000	Sq. mt.
Other outer garments for women, girls and infants	400 000	No
Shirts for men and boys	10 000	No
Cups, mugs, plates, trays & saucers of a diameter exceeding 10 cm	10 000	No
Basins, bowls and dishes	200 000	No
Basins, bowl sets of a diameter exceeding 16cm, but not exceeding 22 cm.	6 000	No
Hoes	100 000	No
Batteries and cells	10 000 000	No
Radios	100 000	No
Bicycles	200 000	No
Smoking pipes, pipe howls, stems etc.	60 000	No
Blankets (cotton)	60 000	No
Sisal bags and sacks	100 000	No
Footwear	150 000	pairs
Handicrafts	8 000	QNT.
Bottles and jars	8 000	QNT.
Glass Tumblers	60	QNT.
Sheets, tubes, bars of iron or steel aluminium sheets and circles	100 000	Tons
Tubes & pipes of iron or steel	4 000	Tons
Chairs & parts thereof of iron or steel (excluding bicycle chain)	300	Tons

8. PRINCIPAL COMMODITIES

(Shs mn)

IMPORTS	1974	1975	EXPORTS	1974	1975
Wheat	96	161	Coffee beans	375	483
Rice	268	239	Raw cotton	473	297
Maize	352	286	Diamonds	122	178
Crude petroleum ..	375	458	Sisal	463	302
Medical and pharmaceutical products	107	302	Cloves	88	321
Paper, paperboard, etc.	105	142	Cashew nuts	196	177
Iron and steel ..	292	238	Tobacco	88	82
Other metals and metal manufactures ..	367	367	Residual fuel oils ..	77	77
Machinery, other than electrical ..	474	766	Cordage, rope and twine of sisal ..	145	88
Electrical machinery	225	262	Pepper and pimento (incl. chillies) ..	69	81
Railway rolling stock	87	270	Tea	69	81
Motor cars	213	169			
Other transport equipment	779	151			
TOTAL (incl. others)	4,877	5,288		2,552	2,547

1976 Exports (million shillings): Coffee 1,283; Cotton 614; Diamonds 159; Sisal 240; Total (incl. others) 4,108.

1977 Exports (million shillings): Coffee 1,857; Cotton 541; Diamonds 97; Sisal 228; Total (incl. others) 4,519.

1978 Exports (million shillings): Coffee 1,303; Cotton 419; Diamonds 168; Sisal 218; Total (incl. others) 3,635.

9. MANUFACTURING

Growth of manufacturing industry has been rapid in recent years, averaging a real 10 per cent annually in the two plan periods, but it started from a small base and still accounts for only 10 per cent of gross domestic product. The oldest larger manufacturing enterprises were in the agricultural processing sector - cigarettes, meat canning, brewing, pyrethrum processing and cashew nut shelling - and import substituting production followed. Textile capacity has been expanded very rapidly in recent years to about 150 sq. m. in 1980; there are five large mills and two more in the pipeline.

Sugar refining and cement capacity have also grown fast. Non-derivative industries include aluminium and steel rolling, iron galvanising, radio assembly, detergent, paper and tyre manufacturing.

There is an oil refinery at Dar es Salaam with an annual capacity of 750,000 tons.

10. TRENDS IN INDUSTRIAL DEVELOPMENT

The third five year plan put heavy emphasis on developing the manufacturing sector. The principal objectives were to process all agricultural commodities, to provide all basic consumer needs, and to launch new industries to process and use other Tanzanian resources - coal, iron ore, phosphates, pulp and paper. Other priorities included more balanced industrial development round centres other than Dar es Salaam, Tanga, Arusha and Mwanza. Investment of Shs5 bn was envisaged, and foreign private capital said to be welcome in mixed enterprises especially in high technology and export industries. The current balance of payments crisis threatens much of this, although finance has been secured for the huge Shs.2 bn Mufindi pulp and paper project.

The prospects for new production are as follows:

(a) In the metal working industries, production is expected to increase at the UFI and Mbeya farm implements factories, apart from strengthening the NECO and Mang'ula workshops. Production will also rise following expansion of the Tanga Steel Rolling Mills and Billet Casting at ALAF.

(b) As for chemical industries, production at the Tanga detergents factory and the Arusha pharmaceuticals plant will be increased and strengthened. Similar is true of the polypropylene bags factory and the Kyejo-based Carbon Dioxide project.

(c) In the textile industry, production at the Musoma Mill will be strengthened and expanded. The Ubungo Spinning Mill will also be in production.

(d) With regard to the leather sector, the Morogoro Shoe Factory will consolidate production and the Morogoro Leather Factory will also be in production.

(e) In the cement and building materials sector, the Tanga Cement Factory followed by the Mbeya factory will be in production. During next year, work on the sheet and container glass factories, ceramics factory and clay bricks project will continue so as to promote further development in this sector.

(f) As regards Industrial Estates, production in three of these estates will be consolidated while SIDO will work to complete 11 other estates in various regions. It is expected that the Iringa, Mbeya and Moshi estates will start production.

(g) Regarding service to industries, efforts to develop and strengthen TBS, TIRDO and TISCO will continue.

The targets of the long term plan have been summarized as follows:

(a) Production of essential consumer goods for Tanzanians. These include clothing, building materials, food and basic social services like health, water supply and education.

(b) To establish engineering and metal working workshops for the making of tools, machine parts and spares in order to raise self reliance capability and develop an internal market for iron and steel.

(c) To establish basic industries, especially iron and coal, chemical industries and industries for the manufacture of building and construction materials.

(d) To establish small scale industries at regional, district and village levels with the aim of producing essential commodities close to the people and effecting a balanced regional and zonal distribution of industries in the country.

(e) To develop industries to process agricultural produce for export to increase foreign exchange earnings.

(f) To advance scientific and technological knowledge by giving training to industrial workers and establishing different centres for industrial technological services.

(g) To promote technical co-operation in industry with neighbouring African countries and various international organizations with the objective of strengthening the contribution of industry in the economy.

(h) In pursuing these goals and principles, efforts will be made to utilize locally available resources rather than depending on imports.

The Industrial Plan within the Third Five-Year Development Plan (1976-1981):

(a) Expanding and setting up new industries in accordance with the long-term plan. In this framework, emphasis is placed on agro and food industries, textiles and leather industries, cement and other building materials industries, metals and engineering industries, chemical and paper industries, and small scale industries.

(b) Raising efficiency and greater utilization of existing industrial capacities.

(c) Preparation for basic and heavy industries.

(d) Developing local technological services to reduce industrial problems.

(e) Taking into account various international strategies and assistance that enhance endeavors to develop industrial production.

In implementing the goals of the Third Five-Year Plan, primary emphasis has been given to a few selected areas in accordance with national needs and capability. These areas include:

(a) Industries producing people's basic needs and those capable of supporting development in other secots of the economy;

(b) Industries to support agriculture and rural development;

(c) Industries to support construction, water and power sectors;

(d) Industries to support transport and communications sectors;

(e) Industries that help raise foreign exchange earnings.

COUNTRY INDUSTRIAL PROFILE - ZAMBIA

Area Sq. Kms 752,614 Population (1978) 5.6 million

1. NATURAL RESOURCES

Electricity

The total installed capacity of hydro and thermal power stations, excluding Zambia's share of Kariba South, amounts to 855 mw and the energy consumption during 1975 amounted to some 5,539.4m. kwh., including imports from Zaire.

The hydro stations are located at Mbala, Mansa, Kasama, Mulungushi, Lunsemfwa and Victoria Falls, Lusiwasi and Kafue Gorge. Work has started on the Kariba North Project. The thermal stations are located on the Copperbelt. A number of diesel power stations have been installed, mostly in the North-Western and Northern Provinces.

Agriculture

About 70% of the population is dependent on agriculture.

Nearly 10% of GDP is provided by the industry. Principal agricultural products (1973) were maize, 386,016 tonnes; tobacco, 6,694 tonnes; groundnuts, 2,784 tonnes; cotton, 4,090 tonnes; sugar, 446,350 tonnes.

Livestock (1976): 2.3m. cattle; 100,000 pigs; 50,000 sheep and 300,000 goats. Poultry (1976): 13.3m. day-old chicks; 250m. eggs; 11.46m live and dressed birds.

Minerals

(metric tons)

	1974	1975	1976	1977
Coal	809,500	813,900	784,000	708,000
Cobalt Ore*	1,964	1,843	1,657	n.a.
Copper Ore*	883,800	806,300	849,600	819,200
Lead Ore*	35,800	26,100	15,500	13,500
Tin Concentrates*	12	10	10	10
Zinc Ore*	80,700	67,300	48,800	45,000
Gold (kg)	179	500	341	244

Gypsum: 1,075 metric tons in 1968; Manganese: 9,563 metric tons in 1968; Silver: 5 metric tons recovered in 1977; Cadmium: 16 metric tons in 1974.

* Figures relate to the metal content of ores and concentrates (or, for cobalt, the metal recovered)

Sources: mainly UN, Yearbook of Industrial Statistics and Monthly Bulletin of Statistics

2. PRINCIPAL CROPS

('000 metric tons)

	1976	1977	1978
Maize*	1,070	980	850
Millet*	90	86	80
Sorghum*	54	51	50
Sugar cane	860	780	820
Potatoes*	3	3	3
Sweet potatoes	18	18	18
Casava (Manioc)*	168	170	173
Onions*	18	18	18
Tomatoes*	24	24	24
Sunflower seed	13	11	12*
Pulses*	14	14	12
Bananas	1	1*	1*
Groundnuts (in shell)	30	31	31
Cottonseed x	30	31	30
Cotton (lint) x	1	3	3
Tobacco	10	7	6

* FAO estimate x Unofficial estimate

Source: FAO, Production Yearbook

3. LIVESTOCK PRODUCTS

(FAO estimates - metric tons)

	1976	1977	1978
Cows' milk	51,000	50,000	48,000
Beef and veal	29,000	28,000	28,000
Pig meat	9,000	10,000	11,000
Poultry meat	14,000	12,000	12,000
Other meat	20,000	20,000	21,000
Hen eggs	19,200	18,876	19,404
Cattle hides	3,633	3,675	3,738

Source: FAO, Production Yearbook

4. INDUSTRY - SELECTED PRODUCTS

(metric tons)

	1975	1976	1977
Raw sugar	85,000	80,000	71,000
Cigarettes (million)	1,300	1,300	1,350
Sulphuric acid	283,000	303,000	275,000
Nitrogen fertilizers	5,600	7,100	7,700
Cement	452,000	385,000	332,000
Copper (unwrought)			
Smelter*	640,300	712,900	659,800
Refined	619,200	694,600	649,000
Lead (primary)	19,100	13,500	13,300
Zinc (primary)	46,800	37,100	40,000
Cobalt metal	1,843	1,657	1,703
Electric energy	452,000	385,000	332,000
(million kWH.) x	6,191	7,046	8,683

* Including some production at the refined stage
x Net production, i.e. excluding station use

1978 (metric tons): Smelter copper 653,000; Refined copper 646,000; Primary lead 14,800; Primary zinc 40,100

Source: mainly Central Statistical Board, Monthly Digest of Statistics

5. MAIN COMMODITIES TRADED

('000 kwachas)

IMPORTS	1975	1976*	1977*
Food	35,747	24,469	28,671
Beverages and Tobacco	1,018	884	879
Crude Materials, inedible	9,892	10,684	9,108
Mineral Fuels, Lubricants and Electricity	81,115	72,616	81,005
Animal and Vegetable Oils and Fats ..	9,087	10,684	9,108
Chemicals	77,293	68,321	58,927
Basic Manufacture ..	140,211	96,796	117,477
Machinery & Transport	211,300	167,926	204,924
Miscellaneous Manufactured Articles	26,698	18,996	19,262
Others	3,250	783	345
TOTAL	597,611	468,589	529,405

EXPORTS	1975	1976*	1977*
Copper ..	472,000	688,600	644,800
Zinc	20,346	26,552	17,920
Lead	5,665	4,421	5,705
Cobalt ..	7,066	15,939	16,226
Tobacco ..	4,969	5,095	5,783
Maize	1,434	513	3,517
TOTAL (inc. others)	521,049	751,908	708,028

* Provisional

6. DETAILS OF IMPORTS

Commodity Description	Quantity	
	Estimate	Unit
Coffee in bulk	600	Kg
Tea in bulk	16 270	Kg
Rice	2 796 898	Kg
Fixed vegetable oil, fluid or solid, crude, refined or purified	1 528 563	Kg
Cottonseed oil	54 163	Kg
Linseed oil	7 670	litres
Fish meal, stockfeed	1 674 719	Kg
Common salt (including rock salt, sea salt and table salt)	5 179	Quint.
Soda ash	2 731 310	Kg
Plywood, timber and timber products	165	m^3
Paper and paper products	12 950	Kg

7. DETAILS OF EXPORTS

Commodity Description	
Coal	Amonium nitrate
Wooden poles	Parquet flooring panels
Bottles, jars, pots and similar containers of glass	Copper rods and cables
Poultry fresh, dead, frozen and day-old chicks	Works of art (ivory, wood, copper)
Beeswax	Maize
Sugar refined	Groundnuts shelled/un-shelled
Gypsum anhydrous	Tobacco manufactured and unmanufactured
Lime	Cement

8. PRINCIPAL COMMODITIES

(a) Marketed Agricultural Output

(tons)

	1975	1976	1977	1978	Est. 1979
Maize	558,380	729,620	677,420	576,000	333,000
Virginia Tobacco	6,466	6,262	5,588	3,700	4,071
Burley Tobacco	502	211	312	264	...
Sugar cane	768,150	851,000	779,600	...	...
Groundnuts	6,511	8,371	7,483	6,024	3,360
Cotton	3,100	3,897	8,929	8,400	14,000
Sunflower	9,750	13,559	13,306	7,550	10,200
Soya bean	383	1,096	1,252	1,180	1,180
Sorghum	57	23	992	...	...
Paddy rice	990	1,785	1,835	1,956	2,080
Wheat	934	3,948	5,323	4,541	6,000

Source: Economic Report

(b) Mineral Production

('000 tons)

	1974	1975	1976	1977	1978	1979
Copper	694.4	640.3	712.9	657.5	643.0	588.3
of which:						
electrolytic	663.9	619.2	694.6	649.3	626.6	570.6
blister	30.6	21.1	18.3	8.1	17.6	20.9
other	-	-	-	-	-	-
Zinc	58.4	46.8	37.1	37.1	42.5	43.6
Lead	24.5	19.1	13.5	13.3	12.7	14.6
Cobalt	2.0	1.8	1.7	1.7	1.6	3.4
Coal	809.4	813.9	783.9	713.0	615.0	651.0

Sources: Monthly Digest of Statistics; World Bureau of Metal Statistics

(c) Index of Manufacturing Production

(1969=100)	Weight	1973	1974	1975	1976	1977	19
Food, beverages & tobacco	54	126.2	131.8	136.1	132.7	132.9	135
Textiles & clothing	18	138.0	155.9	160.0	158.7	137.2	142
Wood products	10	89.1	112.6	92.6	67.7	97.0	93
Paper products	10	168.2	166.6	190.5	155.4	174.5	219
Chemicals & rubber products	24	129.5	152.9	133.7	130.6	139.5	126
Non-metallic minerals	15	124.3	136.5	145.9	129.5	119.9	137
Basic metals	5	99.4	131.3	97.3	100.3	110.1	121
Metal products & other industries	31	130.3	135.8	123.3	122.9	103.2	99
Total manufacturing	167	127.8	139.5	136.3	129.6	127.3	[illegible]

Source: Monthly Digest of Statistics

9. MANUFACTURING

The main manufacturing activity within Zambia is the refining of copper, though this is classified as part of mining output, and is not included in the figures given above. Among the major manufacturing projects in operation in Zambia at the present moment are the following: breweries, a sugar refinery, edible oil products, cigarette factories, Kafue Textiles (manufacturing cloth), Kabwe Industrial Fabrics (making sacks and rope), rubber moulding factories, the Dunlop car tyre plant, Nitrogen Chemicals of Zambia (making ammonium nitrate fertilizers), Kafironda Ltd (producing explosives for the mines), sulphuric acid plants (again for the mines), paint works, the Indeni oil refinery, Chilanga cement factories (making the country self-sufficient in a variety of cement products), Rover (Zambia) and Livingstone Motor Assemblers (both assembling motorcars), bus and truck assembly, a Bata shoe factory, a variety of electrical and mechanical engineering companies producing goods for the copper mines, and a wide range of metal products.

The rate of growth per annum in the output of manufacturing industry averaged 4.9 per cent between 1965 and 1970 and 4.5 per cent between 1971 and 1976. The rate of growth over the latter period compares unfavourably with the target rate of 14.7 per cent per annum set in the Second National Development Plan.

The considerable shortfall from the planned target of the SNDP period highlights the heavy dependence of manufacturing industry on imported supplies. The poor performance of the sector in the final years of the SNDP was closely related to the serious shortage of foreign exchange which emerged after the catastrophic fall in copper prices during 1974. Because of the lack of imported supplies of raw materials, semi-manufactures and spare parts, manufacturing production declined by 3.9 per cent between 1974 and 1975, and by a further 4.1 per cent between 1975 and 1976. Some factories had to be closed down and workers laid off. By contrast, in 1972, manufacturing production increased by no less than 16 per cent. While this was partly due to a number of new industrial plants coming on stream, it also reflected the greater utilisation of existing capacities and unrestricted inflow of imported supplies.

The marked sensitivity of domestic manufacturing production to fluctuations in the availability of foreign exchange reflected the unbalanced industrial pattern which exists in the Zambian economy, and which has continued over the FNDP and SNDP periods. This tended to be biased towards industries which engaged in the processing of imported raw materials. Very few manufacturing enterprises were designed to utilise domestic raw materials and to develop linkages with other sectors of the economy, such as agriculture. There was insufficient attention paid to the development of groups of inter-dependent industries, able to supply each other with semi-manufactured inputs. Assembly plants such as the Livingstone Motor Assemblers and the ITT plant have not been able to do much more than replace imports of assembled products with imports of unassembled products. The contribution of many new industries towards import substitution has, in fact, been marginal. However, in some branches of production, significant progress in import substitution was realised during the SNDP, such as the new glass products factory at Kapiri Mphoshi, the new sulphuric acid plant on the Copperbelt, the tannery at Kafue, fruit and vegetable processing in several smaller plants, and the expansion of cement and lime production.

With the slow growth in manufacturing production over the SNDP, employment in manufacturing industry also failed to increase as planned. A total increase of 24,000 jobs has been projected for the manufacturing sector over the SNDP.

The growth in employment over the SNDP was, in fact, strikingly less than the growth in output. While output increased at an annual rate of 4.5 per cent per annum, employment grew by only 0.5 per cent. In part, the explanation for the discrepancy lay in the existence of considerable under-utilisation of the manufacturing labour force as well as of plant and of equipment at the commencement of the SNDP.

No less important, however, was the pattern of industrialisation during the SNDP. A major part of new investment during the period was directed into industries which, by their very nature, are highly capital-intensive and generate little additional employment; petroleum refinery is a case in point. Moreover, in some industries, where a labour-intensive technology combined with smaller-scale production was economically feasible, more capital-intensive methods were nonetheless chosen; instances were the Kalulushi and Jega-Nega brickworks.

In the development of rural and small-scale industries, little progress was made during the SNDP. Although RUCOM Industries Limited - which was established even before initiation of SNDP - continued to set up mechanical, wood-working and other small workshops in the rural areas, no substantial progress was made.

Export promotion was anther objective of the SNDP which registered only modest progress. Zambia Metal Fabricators Limited (ZAMEFA), however, continued with its exports of copper-wire rods and cables; foreign markets were opened for Zambian-produced car batteries; and among clothing manufacturers, Serioes of Luanshya successfully penetrated the East and West African markets.

Finally, the training of industrial labour has made progress during the SNDP. A number of training courses have been conducted. Zambianisation has steadily progressed all-round, particularly in the parastatal sector and in certain fields of management, administration and, to some extent, sales. However, more efforts need to be exerted for Zambianisation to register some progress in such fields as research and development, operations, finance, marketing and technical management.

10. TRENDS IN INDUSTRIAL DEVELOPMENT

Given the objective of the diversification of the economic structure in order to reduce the economy's dependence on the copper mining sector, manufacturing has to play a much more decisive role than in the past.

The strategy for this sector postulates rectifying the lop-sided development of the manufacturing sector and redressing the existing bias in favour of capital-intensive techniques. The core of the strategy is:

(i) To promote import substitution and export-orientation, by establishment of industries based on maximum use of local agricultural and mineral raw materials.

(ii) To pursue an integrated approach towards industrialisation by establishing industries which are closely linked with each other and by utilising all agricultural and industrial by-products and wastes.

(iii) To pay special attention to choice of technology having regard to factor endowment and size of the domestic market.

(iv) To attach highest priority to development of small-scale and rural industries:

(a) Small-scale industries, whether in the manufacturing sector, non-manufacturing sector or informal sector, generate more jobs per unit of investment than larger firms. Their indirect employment impact is also greater because they draw more on domestic sources as against the larger capital-intensive firms which rely heavily on imported inputs. In addition, small-scale industries are highly instrumental in encouraging local entrepreneurship. In view of the manifold advantages of small-scale industries and the appropriateness of the technology involved, establishment of these industries, particularly in the rural areas, is one of the priority objectives of the TNDP.

(b) These small-scale industries include agro-industries, food-processing industries as well as industries for the manufacture of simple agricultural implement and machine tools. They are to be developed along with a network of mechanical and repair workshops as an integral part of a planned development of each district.

(c) Village industries, such as that run by a self-employed person with the help of his family, working with simple tools and requiring minimum investment, constitute another type of activity which will be encouraged as an integral part of rural development. Village industries best suited to exploit Zamiba's agro-mineral resources include oil-crushing, stockfeed, leather tanning, shoe and leather work and repair, matches, paper, soap-making, rope-making. basket-making, blacksmithing, pottery, and such traditional crafts as wood and ivory carving. In order to stimulate, assist and promote the development of village industries throughout the country, a Village Industry Service has been set up.

(d) Marketing and finance are the two major problems of small-scale industries. The Government will provide the necessary fiscal incentives and credit facilities, and adopt a preferential purchase policy towards the products of small industries. A number of institutional and organisational measures are also envisaged, the foremost being the establishment of a Small-Scale Industries Development Corporation.

(v) To convert existing assembly plants into manufacturing plants by increasing the number of stages of production to be undertaken locally. In this context again, small-scale industries can be ancillaries for supplying parts and ocmponents to major units.

(vi) To give priority to the fullest utilisation of the existing industrial capacities, by arranging adequate supply of raw materials and input and to pay due attention to cost control and maintenance of essential capital equipment.

(vii) To provide for the establishment of essential capital goods industries.

Given these objectives, a number of priority industries have been selected for emphasis during the plan. These priority industries include agro-industries, copper-based industries, fertilisers, sulphuric acid, mining equipment, agricultural tools and implements, cement industry, ceramic industry and pre-fabricated building elements. Notwithstanding the predominant role of the parastatal sector, the plan provides to the private investor, both domestic and foreign, various incentives under the Industrial Development Act in order to enable the private sector to play its rightful role at the present stage of Zambia's economic development. The Act does not discriminate against any investor, domestic or foreign, provided certain requirements regarding transfer of technology are fulfilled and all such investments are directed into the priority industries as set out in the plan. In this context, joint ventures between a foreign investor and a Zambian Counterpart will be encouraged by assuring to the former, remittance of profits and fair treatment.

COUNTRY INDUSTRIAL PROFILE - ZIMBABWE

Area Sq. Kms 390,622 Population (1979) 7.1 million

1. NATURAL RESOURCES

Agriculture

The gross value of agricultural output in 1979 was Z$443 mn. Of this about Z$80 mn came from the Tribal Trust Lands where the farmers are all Africans. Sales to marketing authorities from Tribal Trust Lands amounted to only Z$15.4 mn in 1979. The Z$363 mn produced in the rest of the country came overwhelmingly from the white farmers who dominate the commercial farming scene, having not only the best land in large quantities, but access to capital and the technological skills to use it.

Until UDI in 1965 tobacco was the basis of Rhodesia's agricultural prosperity and its main export. Sanctions were effective in the first few years, but evaded later. By 1970 tobacco sales were down to less than a third of the pre-UDI levels by value and volume. The position improved considerably over the subsequent years but tobacco never regained its previous position and when the first open auctions were held in 1980 farmers were deeply disappointed with prices and production is likely to be affected. However, diversification programmes were very successful and crops such as cotton, coffee, sugar and soya beans, wheat and sorghum have expanded rapidly, some of which were hardly grown prior to UDI. Many of these crops were grown for export on a capital intensive basis by such international companies as Lonrho and Liebigs. Maize continues as the main staple crop in Zimbabwe where hybrids have enabled very high returns to be reached. Beef now ranks more or less equally with tobacco in the value of production. The cattle herd totalled about 5.6 mn head in 1979. The destruction of dip tanks and the general dislocation of the war has meant that tick borne diseases have killed an estimated 1 mn of the 3.4 mn head of cattle previously held in Tribal Trust Lands. Commercial farmers owned 2.8 mn cattle in 1979.

Mining

Although its mining industry is small by world standards, Zimbabwe is amongst the top mineral abundant countries of the world on a per hectare or per person basis.

Over 40 different minerals are produced but approximately 85 per cent of mineral production is derived from gold, asbestos, nickel, copper, coal and chrome ore.

In 1979, mining activity directly employed 60,000 persons (6 per cent of the formal labour force), contributed 8 per cent to GDP and earned Z$270 million of foreign exchange, two-fifths of total merchandise export value. The sector is highly diversified and efficient. Even without major new investments the sector can be relied upon to provide continued employment opportunities and foreign exchange earnings provided potential manpower shortages and transportation problems are attended to. An additional issue, increasing indigenous participation in mining sector management and production, is also important.

Energy

Zimbabwe has no domestic oil supplies but has huge deposits of coal at Wankie which, together with hydroelectricity, mean that oil imports are used mostly for transport and lubrication. Liquid fuels, which are all imported, comprised about 15 per cent of total energy consumed in 1978, according to estimates derived from UN figures.

2. PRINCIPAL CROPS

(FAO estimated, '000 metric tons)

	1976	1977	1978
Wheat	85	85	90
Maize	1,400	1,300	1,400
Millet	220	220	220
Sorghum	50	50	50
Sugar cane	2,300	2,500	2,300
Potatoes	25	26	26
Dry beans	25	25	25
Oranges	25	27	27
Groundnuts (in shell)	120	120	120
Seed cotton	117	99	99
Cottonseed	78	66	66
Tea	3	3	3
Tobacco	103	83	56
Cotton (lint)	39	33	33

Source: FAO, Production Yearbook

3. LIVESTOCK PRODUCTS

(FAO estimates, '000 metric tons)

	1976	1977	1978
Beef and veal	155	167	150
Mutton and lamb	2	2	2
Goats' meat	7	7	7
Pig meat	11	12	11
Poultry meat	8	8	9
Other meat	13	14	14
Cows' milk	255	260	250
Butter	3.2	3.3	3.2
Cheese	4.6	4.7	4.5
Hen eggs	9.5	10.2	10.8
Cattle hides	23.1	25.0	22.5

Source: FAO, Production Yearbook

4. INDUSTRY-SELECTED PRODUCTS

In 1979, manufacturing value added was 25 per cent of GDP and the sector employed 14.6 per cent of total formal employment. Labour productivity (gross value added per employee) was Z$4,210 or the highest among the commodity producing sectors. Much of the sector is resource based and two industrial groupings, metal and metal products and foodstuffs, drinks and tobacco products, dominate. These groupings are of approximately similar size and together contribute about 55 per cent of industrial value added and provide about 50 per cent of employment in the manufacturing sector. The most important industry within the first grouping is iron and steel. Significant industries in the second grouping ranked by value added are beer and spirits, dairy products, tobacco, slaughtering and milling.

5. MAIN COMMODITIES TRADED

Exports of Principal Commodities 1974 - 79
(000 tons)

	1974	1975	1976	1977	1978	1979
Sugar	178.5	156.6	151.1	151.9	136.1	244.6
Maize	541.6	845.5	345.1	392.3	507.4	218.6
Tea	4.8	4.9	4.2	4.5	7.6	1.8
Beef	49.2	40.8	48.1	58.7	55.1	43.4
Tobacco (unmanufactured)	71.9	56.6	76.0	65.9	75.9	60.5
Asbestos	261.3	277.8	279.5	250.0	212.4	285.0
Chrome Ore	266.8	283.7	135.3	87.6	20.0	11.5
Cotton Lint	48.4	35.0	45.1	39.7	46.6	49.3
Cattle Hides	10.7	8.8	11.3	62.4	12.1	11.2
Coke	0.1	0.1	0.1	0.1	0.1	0.1
Copper Metal	40.7	41.9	34.3	32.9	35.8	26.6
Nickel Metal	11.4	8.6	13.3	15.6	16.5	13.9
Tin Metal	0.9	0.9	0.8	0.8	0.7	0.9
Ferro Chrome	156.9	186.7	245.0	106.9	101.5	170.9

Source: Treasury Officials, December 1980

6. DETAILS OF IMPORTS

Imports:	Quantity
Fish: dried, salted, smoked	271 tons
Tallow: animal	4,354 tons
Tallow: oil	49 tons
Tallow: vegetable	24 tons
Common Salt: in bulk	47,603 tons
Natural Sodium Carbonate (Soda Ash)	5,859 tons
Tanning extract of vegetable origin	
Synthetic organic tanning substances, inorganic tanning substances, tanning preparations	617 tons
Wood Pulp	19,444 tons
Bovine cattle leather and equine leather	76 tons
Sheep and lamb skin leather	
Goat and kid skin leather	
Other kinds of leather	
Chamois dressed leather	
Patent leather and imitation patent leather, matelised leather	
Fish Meal	1,034 tons
Hardwood in the rough	1,919 cu.m.
Hardwood roughly square	
Hardwood sawn lengthwise, sliced or peeled	
Natural rubber latex	3,191 tons
Natural rubber, balata gutta-percha and similar natural gums	
Synthetic rubber latex, synthetic rubber	3,738 tons
Yarn of man made fibres (continuous)	7,040 kg.
Man made fibres (discontinuous)	

7. DETAILS OF EXPORTS

EXPORTS (1979)	Z$ Million	Thousands of Tons	
Food			
Sugar	20.6	244.6	
Maize	17.0	218.6	
Tea and coffee	17.6	1.8	Tea only
Meat	37.8	43.4	
Tobacco and Beverages			
Tobacco	81.4	60.4	Unmanufactured
Beverages	0.1		
Crude Materials			
Asbestos	[illegible]0.5	285.0	
Chrome ore	0.4	11.5	
Cotton lint	46.4	49.3	
Cattle Hides	9.4	11.2	
Coke)		0.1	
Copper Metal)		26.6	
Nickel Metal)	18.3	13.9	
Tin Metal)		0.9	
Ferro Chrome)		170.9	
Mineral Fuels	9.5		
Oils and Fats	6.1		
Chemicals	5.6		
Manufactured Goods			
Steel Ingots	26.0		
Steel Bars	23.7		
Copper Metal	26.2		
Tin Metal	8.5		
Ferro Chrome	43.6		
Nickel Metal	32.3		
Others	3.8		
Machinery and Transport Equipment			
Radios and parts	4.1		
Cars and parts			
Others	10.6		
Miscellaneous Manufactured Goods			
Apparel	11.7		
Footwear	4.6		
Others	47.1		

8. PRINCIPAL COMMODITIES

(a) Agricultural - 1979	Unit	
Maize	Tons	1,162,000
	Value	70,093
Tobacco-Burley	Tons	2,778
	Value	2,177
Tobacco-Flue Cured	Tons	111,686
	Value	92,023
Groundnuts (shelled)	Tons	29,849
	Value	12,261
Wheat	Tons	158,940
	Value	18,110
Soya Beans	Tons	80,999
	Value	11,853
Seed Cotton	Tons	166,830
	Value	54,871
Sorghum	Tons	50,083
	Value	3,790
Sunflower Seeds	Tons	n.a.
	Value	n.a.
Coffee	Tons	4,106
	Value	10,565
Cattle	Head	653,000
	Value	85,660
Sugar	Tons	(310,000)
	Value	33,466
Milk (Commercial Herds)	Tons	(155,000)
	Value	24,149

Sources: Ministry of Agriculture, Zimbabwe
A Guide to Zimbabwe
Agricultural Marketing Authority, Zimbabwe

December 1980

(b) Mineral - 1979	('000 tons)	Z$ '000
Copper	29.6	35,149
Asbestos	259.6	65,864
Chrome	541.8	16,139
Gold	386.0	80.912
Nickel	14,591.0	45,077
Silver	977.0	7,259
Iron Ore	1,201.0	7,387
Tin Metal	947.0	9,946
Coal	3,188.0	25,843
Cobalt	204	5,223
Other		16,005
Total		314,804

Source: Monthly Digest of Statistics, August 1980

(c) Manufacturing - 1978	Z$ '000)
Foodstuffs (including stockfeed)	351,307
Drink and Tobacco	121,202
Textiles (including ginning)	165,008
Clothing & Footwear	80,765
Wood and Furniture	37,166
Paper, Printing & Publishing	71,918
Chemical & Petroleum Products	205,734
Non-Metallic Mineral Products	38,295
Metals and Metal Products	298,680
Transport Equipment	42,870
Electrical Machinery	40,037
Other Manufacturing Groups	17,051
All Manufacturing Groups	1,470,033

Source: The Census of Production 1978/1979

9. MANUFACTURING

Numerous financial and promotional institutions support manufacturing activities. A full range of facilities for financial intermediation are available. In recent years commercial banks have advanced a total of Z$75-85 million to the manufacturing sector or about 24 percent of their total advances, generally at interest rates of between 5-8 per cent. IDC has been a significant development institution.

From 1963 to date it has provided equity investments and loans to 25 companies totalling about Z$25 million for a diverse set of manufacturing activities such as motor assembly, engineering, textiles, clothing and chemicals, as well as mining and financial services. A great majority of small industries assisted by IDC have become healthly and prosperous businesses. Other help for smaller businesses includes the Development Finance Company (Private) Ltd., which was established by IDC in 1979 primarily to assist small businessmen. Two other institutions, the small Industry Advisory Service and the Institute of Business Development have been functioning for several years. Both these institutions are in the private sector but are supported by the Government.

10. TRENDS IN INDUSTRIAL DEVELOPMENT

The government's overall economic objectives for the next three years were set down in the official Zimcord paper. They include an expected real annual increase in GDP of 8 per cent (with 15 per cent inflation). Increases by sector include (by annual per cent) agriculture 12, mining 8, manufacturing 11, social services 6, public administration 4, electiricty and water 7, construction 7, transport and communication 6.5, others 6. Gross investment as a ratio of GDP is expected to be 25 per cent, with imports 31 per cent and exports 30 per cent of GDP.

The plan for the three year transitional programme (1981-84) set out in the Zimcord document envisages total capital investment of some Z£3.9 bn ($5.7 bn). Of this some Z$1.2 bn is to be directed to rural development (Z$786 mn), the refugee and reconstruction programme (Z$240 mn), and training programmes (Z$234 mn). The balance of Z$2.7 bn relates to the "National Infrastructure and Modern Sector Development Programme", with energy (Z$1.1 bn), urban development (Z$600 mn) and transport (Z$437 mn) the main priorities. The plan assumes that 51 per cent of total investment will be carried out by the private sector.

Total foreign content is put at Z$2.3 bn of which about half will come from foreign aid. This means that the country is expecting an annual inflow of Z$400 mn in foreign investment over the next three years.

It is the Government's long term policy to restructure the economy and mobilize economic resources to facilitate their efficient allocation in order to achieve balanced growth. The target is for an average annual growth rate of 8 per cent in real terms. Restructuring the economy will include resettling those displaced by war and those without land. For the various sectors the following policies apply:

Rural Development

An extensive programme of land reform including complementary services, establishment of policies to achieve the objective of food self-sufficiency, integration of the agricultural sector by settling of large number of peasant farmers form crowded tribal trust lands, state farms and co-operatives, small/ medium manufacturing and commercial enterprises around small centres for productive employment.

Manufacturing

Policy will aim at boosting manufacturing in general, boosting exports in particular and at making more effective and extensive use of local industrial and intermediate inputs; encouraging linkages between on the one hand manufacturing and on the other peasant agriculture and medium and small scale rural industries; employment expansion and use generally of more labour intensive technologies; geographical decentralisation of industries.

Mining

Beneficiation of minerals through to fabrication for the local and export markets; an acceptable and effective marketing system; the method and rate of exploitation should be consistent with the desirability to conserve the major minerals for national economic needs. Government will require the early exercise of rights acquired under exclusive prospecting orders with a view to the early release of all land not required for mining purposes.

Investment in the Rural Area

Keypoint of economic policy. On the question of foreign investment it is welcomed in:

(i) new enterprises in the rural areas;

(ii) new enterprises, especially those requiring specific technology available to the foreign investor which will make an additional net contribution to the economy including training of Zimbabweans;

(iii) new enterprise on a joint venture basis;

(iv) existing enterprises needing additional foreign capital to increase productivity;

(v) undertakings promoting more intensive use of local raw materials and processed inputs;

(vi) labour intensive technology and easily adopted appropriate technology;

(vii) activities in which generation of exports is possible in a reasonable time.

TRADE FLOWS IN INDUSTRIAL COMMODITIES

EXPORTER: ANGOLA

IMPORTERS

Commodities	BOTSWANA	LESOTHO	MALAWI	MOZAMBIQUE	SWAZILAND	TANZANIA	ZAMBIA	ZIMBABWE
Coffee	*			*	*		*	
Palm Oil						*	*	
Hides		*				*	*	
Processed fish products				*	*		*	*
Sisal								*
Tobacco	*			*				
Wood & Pulp							*	*
Cement	*	*			*	*	*	
Dried beans					*			
Tyres					*			
Paints & Varnishes	*			*		*		*
PVC	*	*	*		*	*	*	*
Ceramic ware					*			*
Reinforcing iron bars							*	

TRADE FLOWS IN INDUSTRIAL COMMODITIES

EXPORTER: BOTSWANA

IMPORTERS

Commodities	ANGOLA	LESOTHO	MALAWI	MOZAMBIQUE	SWAZILAND	TANZANIA	ZAMBIA	ZIMBABWE
Meat and by-products	*			*				
Hides		*				*	*	
Edible Oils	*					*	*	
Soda ash							*	*
Candles			*		*		*	*

TRADE FLOWS IN INDUSTRIAL COMMODITIES

EXPORTER: LESOTHO

IMPORTERS

Commodities	ANGOLA	BOTSWANA	MALAWI	MOZAMBIQUE	SWAZILAND	TANZANIA	ZAMBIA	ZIMBABWE
Furniture	*	*		*				*
Candles			*		*		*	*
Garments	*	*	*	*				
Wool and Mohair								*
Processed fruits and vegetables	*							
Upholstery	*	*		*				*
Medicines	*	*	*		*	*		*
Ceramic table-ware					*			*
Footwear	*	*	*			*		
Umbrellas	*			*	*			
Building materials		*				*		*

TRADE FLOWS IN INDUSTRIAL COMMODITIES

EXPORTER: MALAWI

IMPORTERS

Commodities	ANGOLA	BOTSWANA	LESOTHO	MOZAMBIQUE	SWAZILAND	TANZANIA	ZAMBIA	ZIMBABWE
Tobacco		*		*				
Tea	*	*					*	
Sugar	*	*	*			*		
Groundnuts		*			*			
Cotton								*
Beans & Peas	*							
Structural fabrication	*	*						*
Processed food				*	*		*	*
Textiles	*	*		*				
Leather goods	*	*						
Paper products	*	*		*		*	*	
Industrial machinery					*			

TRADE FLOWS IN INDUSTRIAL COMMODITIES

EXPORTER: MOZAMBIQUE

IMPORTERS

Commodities	ANGOLA	BOTSWANA	LESOTHO	MALAWI	SWAZILAND	TANZANIA	ZAMBIA	ZIMBABWE
Sea food					*		*	*
Tea	*	*			*			
Cement					*	*	*	
Milk	*					*		
Wood						*	*	*
Agricultural pumps	*			*		*		
Garments	*	*		*				
Footwear	*	*		*		*		
Glass products	*							*
Refrigerators						*		
Furniture		*					*	
Building materials		*				*		*
Iron sheets		*						*
GLS lamps						*		
Trailers				*		*		

TRADE FLOWS IN INDUSTRIAL COMMODITIES

EXPORTER: SWAZILAND

IMPORTERS

Commodities	ANGOLA	BOTSWANA	LESOTHO	MALAWI	MOZAMBIQUE	TANZANIA	ZAMBIA	ZIMBABWE
Honey			*					
Beverages	*							
Wood and pulp						*	*	*
Asbestos						*		
Meat and meat products	*				*			
Tallow								*
Sugar	*	*	*			*		
Vegetable oils	*					*	*	
Furniture		*						
Ceramic ware						*		*
Glassware	*							*
Paints		*			*	*		*
Explosives						*		
Fertilisers	*					*		
Tractors	*							
Paper and paper products	*	*		*	*	*	*	
Garments	*	*		*	*			

TRADE FLOWS IN INDUSTRIAL COMMODITIES

EXPORTER: TANZANIA

Commodities	IMPORTERS							
	ANGOLA	BOTSWANA	LESOTHO	MALAWI	MOZAMBIQUE	SWAZILAND	ZAMBIA	ZIMBABWE
Coffee	*	*			*	*	*	
Tea	*	*				*	*	
Spices						*		
Cocoa beans						*		
Salts								*
Canned beef	*							
Sisal products								*
Edible oils	*						*	
Honey			*					
Wood							*	*
Alcoholic beverages	*							
Cigarettes	*							
Soap and detergents	*	*						
Insecticides					*			*
Tyres & tubes	*							
Leather goods	*	*		*				
Construction materials		*			*			*
Refined sugar	*	*	*					
Garments	*	*		*	*			
Blankets		*						

TRADE FLOWS IN INDUSTRIAL COMMODITIES

EXPORTER: TANZANIA (Continued)

IMPORTERS

Commodities	ANGOLA	BOTSWANA	LESOTHO	MALAWI	MOZAMBIQUE	SWAZILAND	ZAMBIA	ZIMBABWE
Glass containers	*							*
Steel tubes and pipes	*	*						
Ceramic ware						*		*
Agricultural implements	*			*				
Fertilisers	*							
Paper products	*						*	
School materials	*			*				
Fabricated metal items	*	*						*

TRADE FLOWS IN INDUSTRIAL COMMODITIES

EXPORTER: ZAMBIA

IMPORTERS

Commodities	ANGOLA	BOTSWANA	LESOTHO	MALAWI	MOZAMBIQUE	SWAZILAND	TANZANIA	ZIMBABWE
Copper and products	*				*		*	
Zinc	*							
Lead								*
Tobacco		*			*			
Poultry							*	
Groundnuts	*							
Lime						*		*
Cement		*	*			*	*	
Sugar		*	*					
Aluminium utensils	*							*
Glass materials								*
Wood by-products	*							*
Textiles	*	*		*	*			

TRADE FLOWS IN INDUSTRIAL COMMODITIES

EXPORTER: ZIMBABWE

IMPORTERS

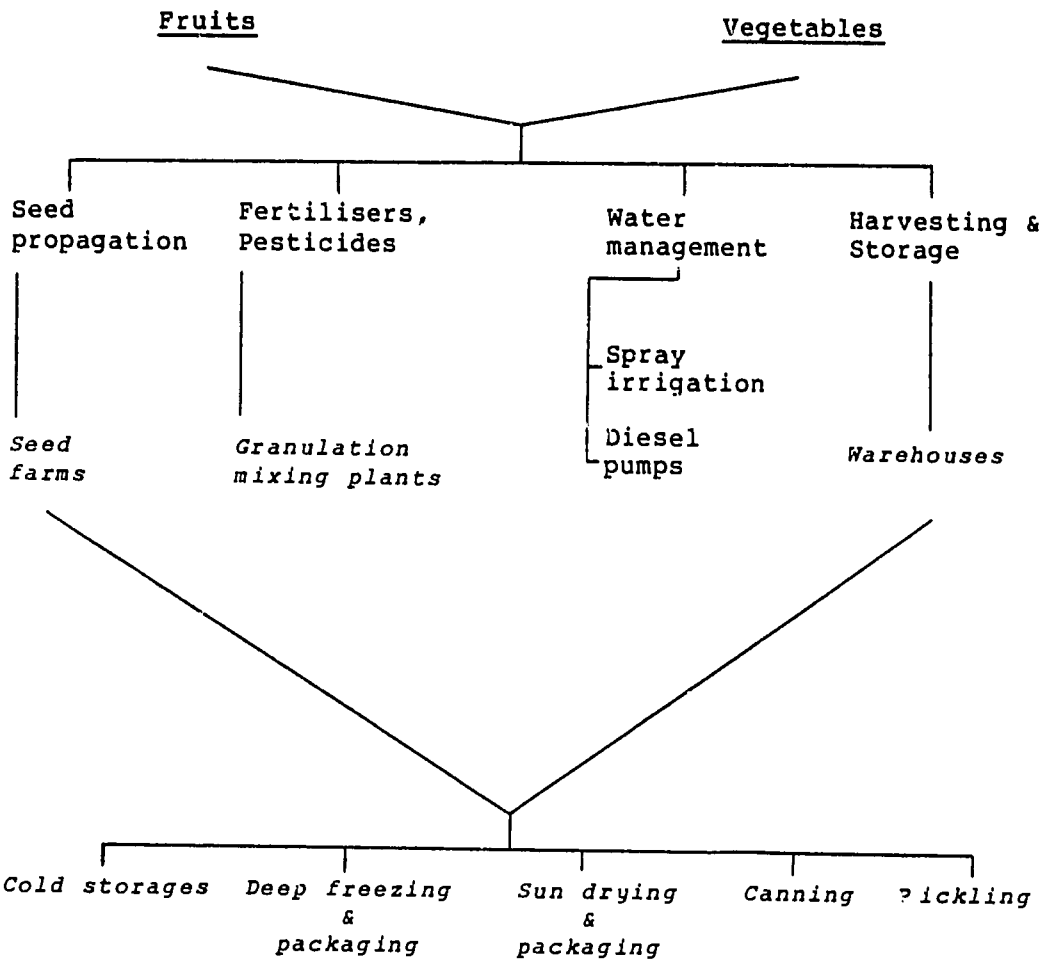
Commodities	ANGOLA	BOTSWANA	LESOTHO	MALAWI	MOZAMBIQUE	SWAZILAND	TANZANIA	ZAMBIA
Sugar	*	*	*				*	
Tea								*
Coffee		*			*	*		*
Tobacco		*			*			
Beverages	*							
Asbestos							*	
Hides and skins			*				*	*
Edible Oils	*						*	*
Chemicals						*	*	
Steel ingots and bars	*							
Copper	*						*	
Cement		*	*			*	*	*
Cars and parts	*	*		*		*		
Garments	*	*		*	*			
Footwear	*	*		*			*	
Earthmoving equipment	*	*		*	*	*	*	*
Industrial machinery						*		

ANNEX III

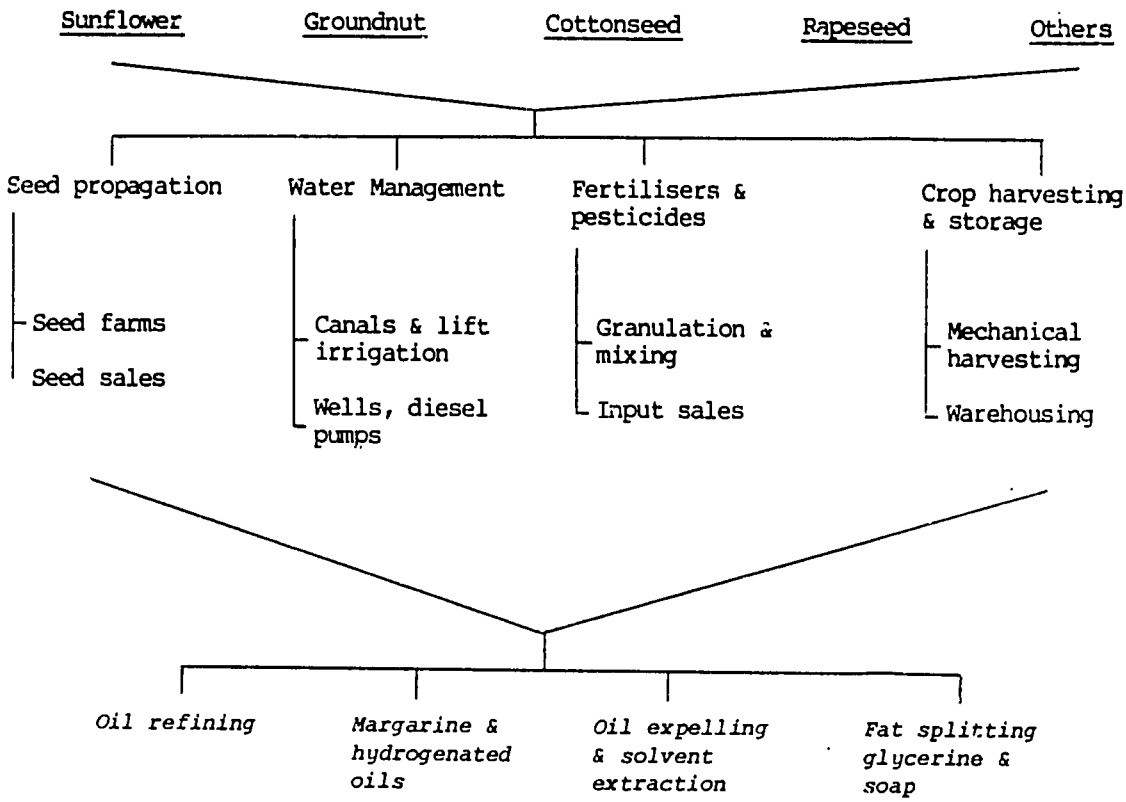
FORWARD & BACKWARD LINKAGES OF SELECT INDUSTRIES

Words in italics indicate the industrial units to be developed in small and medium sectors.

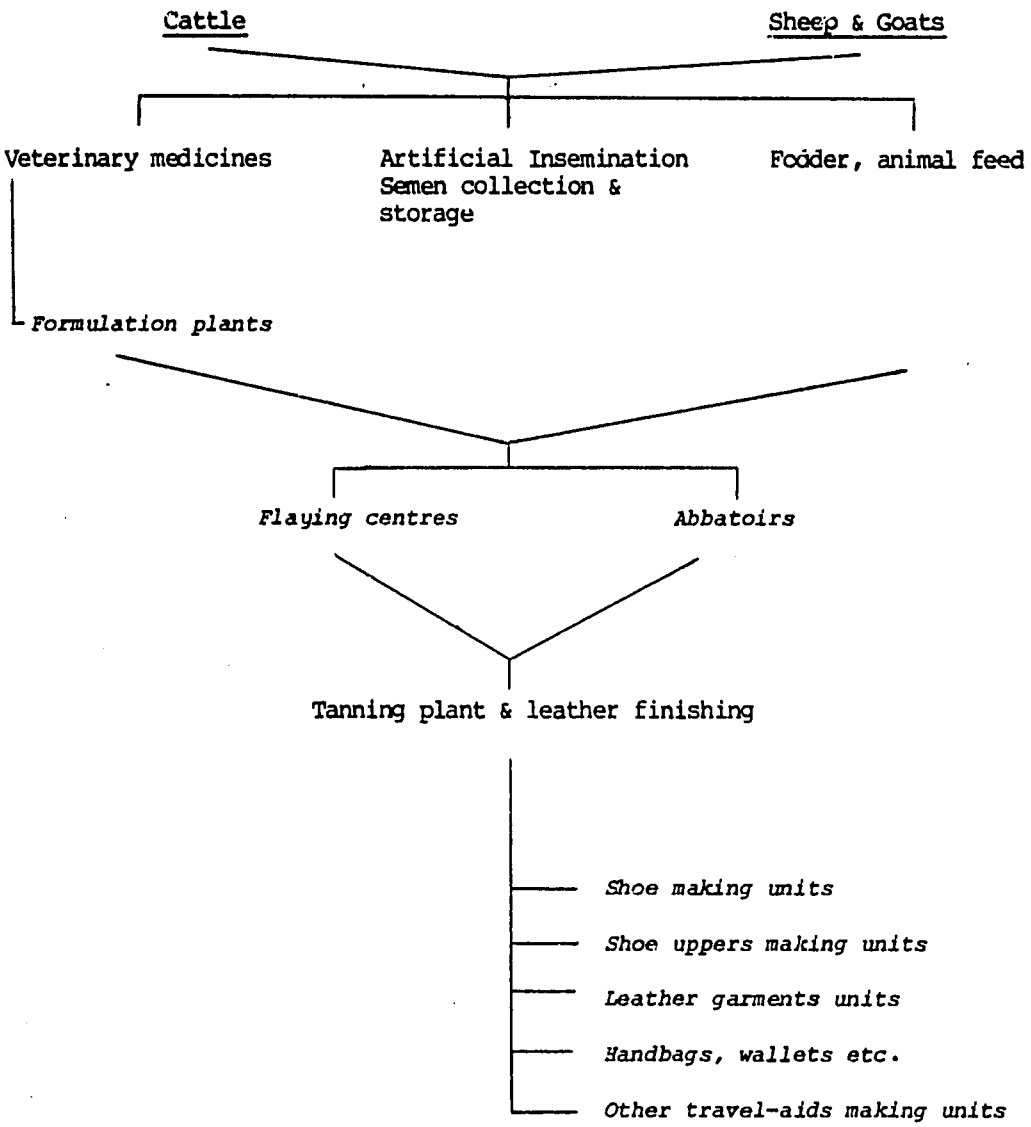
FOOD PROCESSING



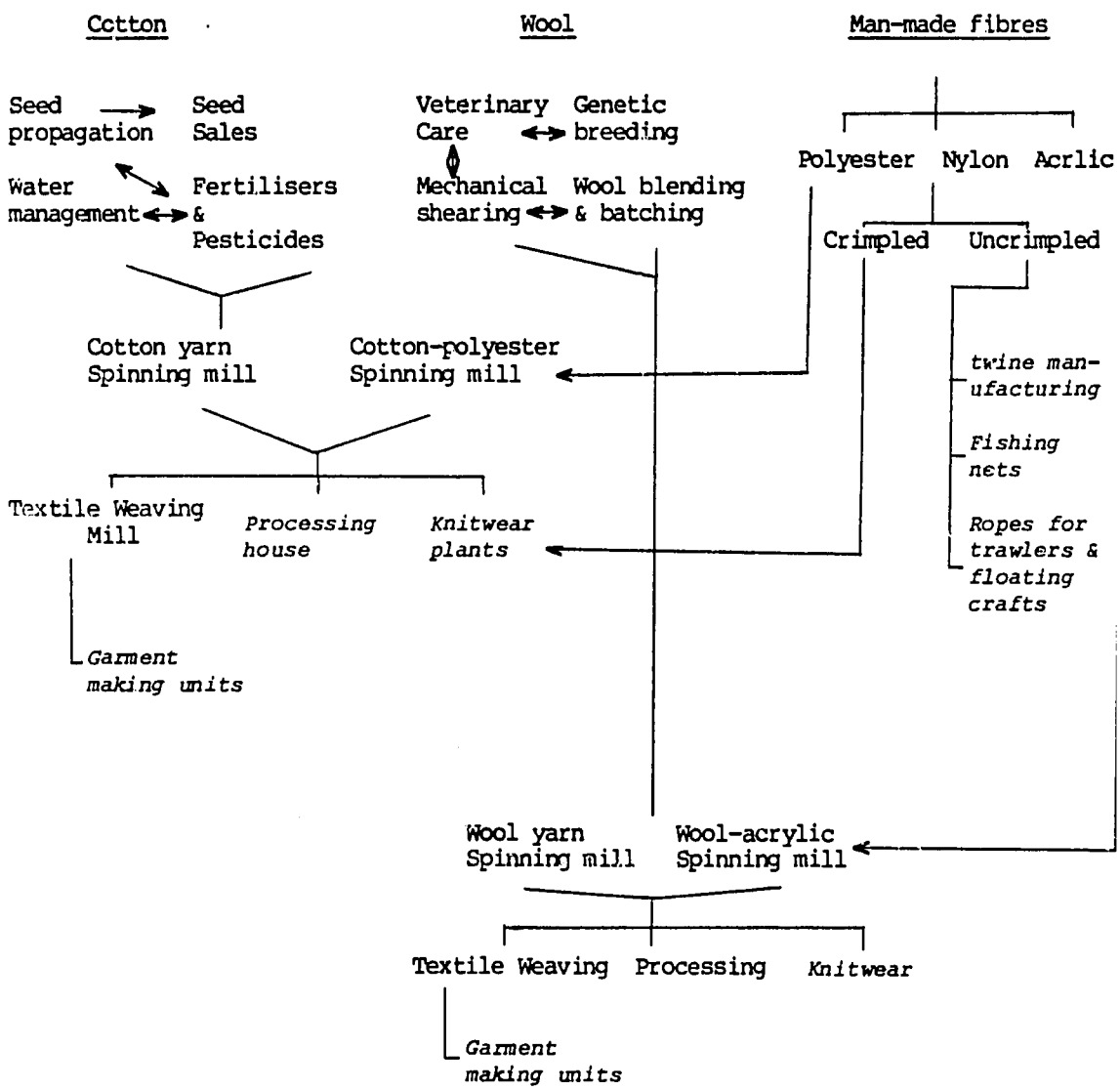
EDIBLE OILS


Sunflower
Groundnut
Cottonseed
Rapeseed
Others
Seed propagation
Water Management
Fertilisers & pesticides
Crop harvesting & storage
Seed farms
Seed sales
Canals & lift irrigation
Wells, diesel pumps
Granulation & mixing
Input sales
Mechanical harvesting
Warehousing
Oil refining
Margarine & hydrogenated oils
Oil expelling & solvent extraction
Fat splitting glycerine & soap

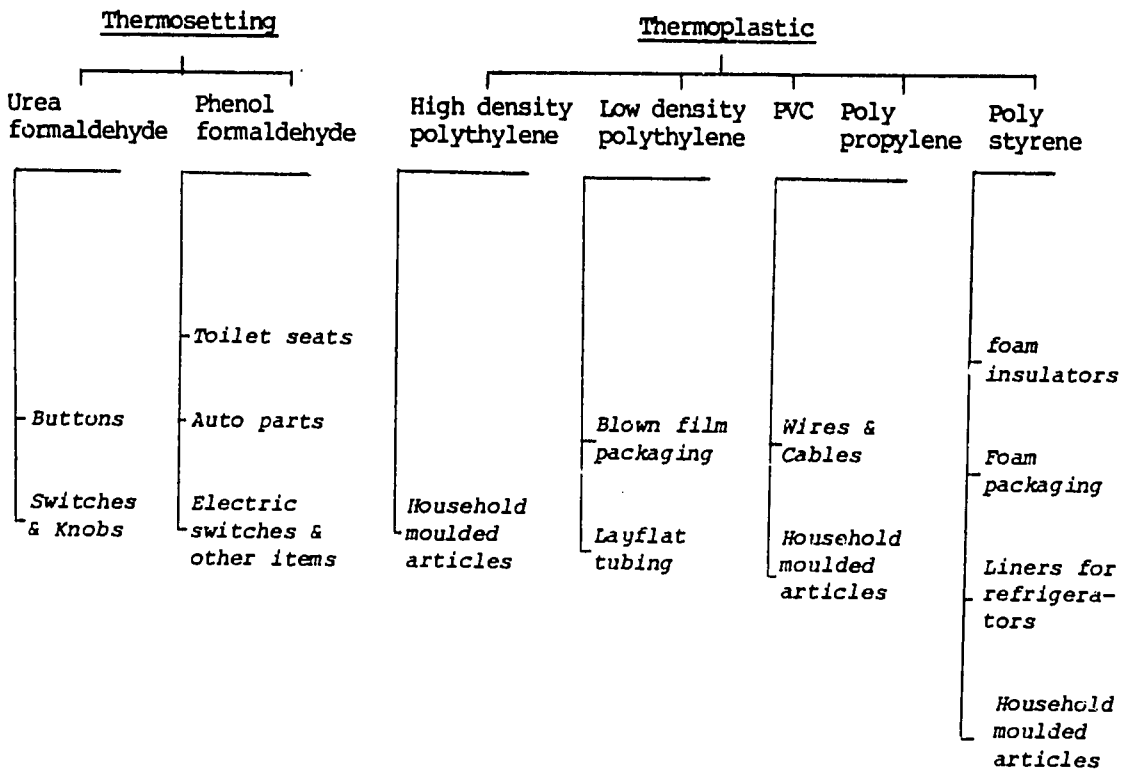
LEATHER INDUSTRY



TEXTILES


Cotton
Wool
Man-made fibres
Seed propagation
Seed Sales
Water management
Fertilisers & Pesticides
Veterinary Care
Genetic breeding
Mechanical shearing
Wool blending & batching
Polyester
Nylon
Acrlic
Crimpled
Uncrimpled
Cotton yarn Spinning mill
Cotton-polyester Spinning mill
twine manufacturing
Fishing nets
Ropes for trawlers & floating crafts
Textile Weaving Mill
Processing house
Knitwear plants
Garment making units
Wool yarn Spinning mill
Wool-acrylic Spinning mill
Textile Weaving
Processing
Knitwear
Garment making units

PLASTICS


Thermosetting
Thermoplastic
Urea formaldehyde
Phenol formaldehyde
High density polythylene
Low density polythylene
PVC
Poly propylene
Poly styrene
Buttons
Switches & Knobs
Toilet seats
Auto parts
Electric switches & other items
Household moulded articles
Blown film packaging
Layflat tubing
Wires & Cables
Household moulded articles
foam insulators
Foam packaging
Liners for refrigera-tors
Household moulded articles

BUILDING MATERIALS

Baked clay

- *Bricks*
- *Roofing tiles*

Wood

- *Window frames*
- *Door frames*
- *General joinery*

Steel

- *Meshes*
  - *chicken type*
  - *chain link type*
- *Window grills*
- *Rolling shutters*
- *Builders hardware*

RCC

- *Terrazzo tiles*
- *Screens*
- *Lintels & slabs*
- *Pipes*
- *Tanks*

EDUCATION HARDWARE

Buildings

- *Bricks*
- *Mosaic tiles*
- *Doors & windows*
- *Roofing tiles*

Furniture

- *Wooden furniture*
  - *desks*
  - *tables*
  - *chairs*
- *Steel furniture*
  - *cupboards*
  - *lockers*
  - *almirahs*

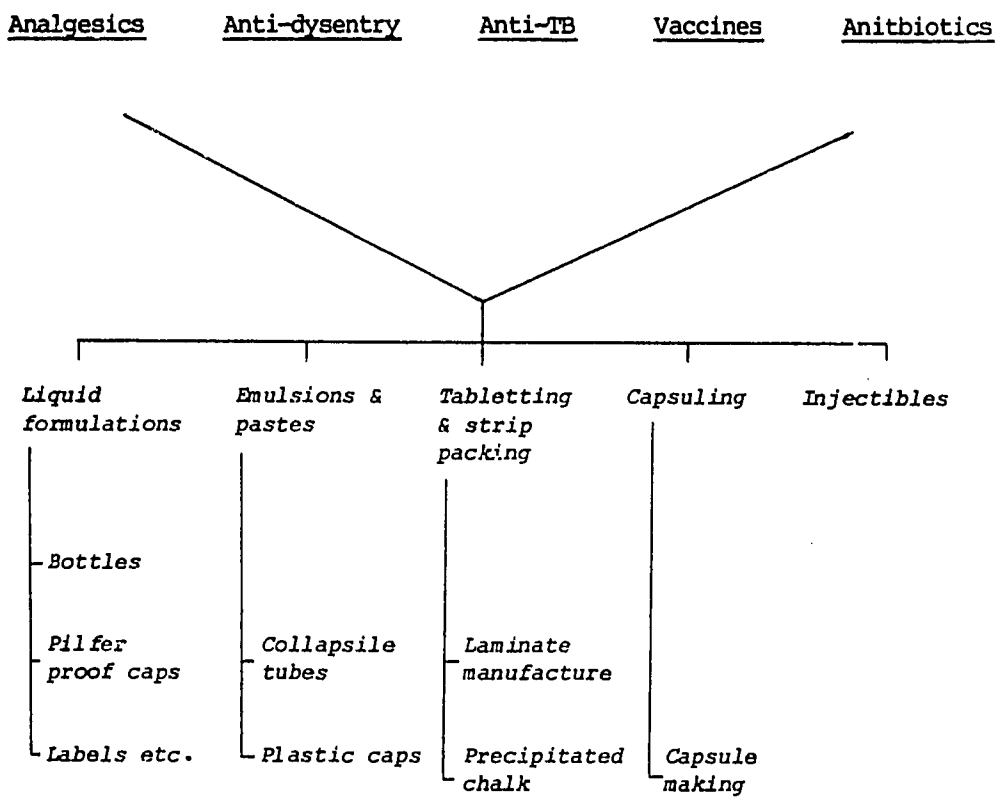
Books

- *Printing*
- *Binding*
- *Distribution*

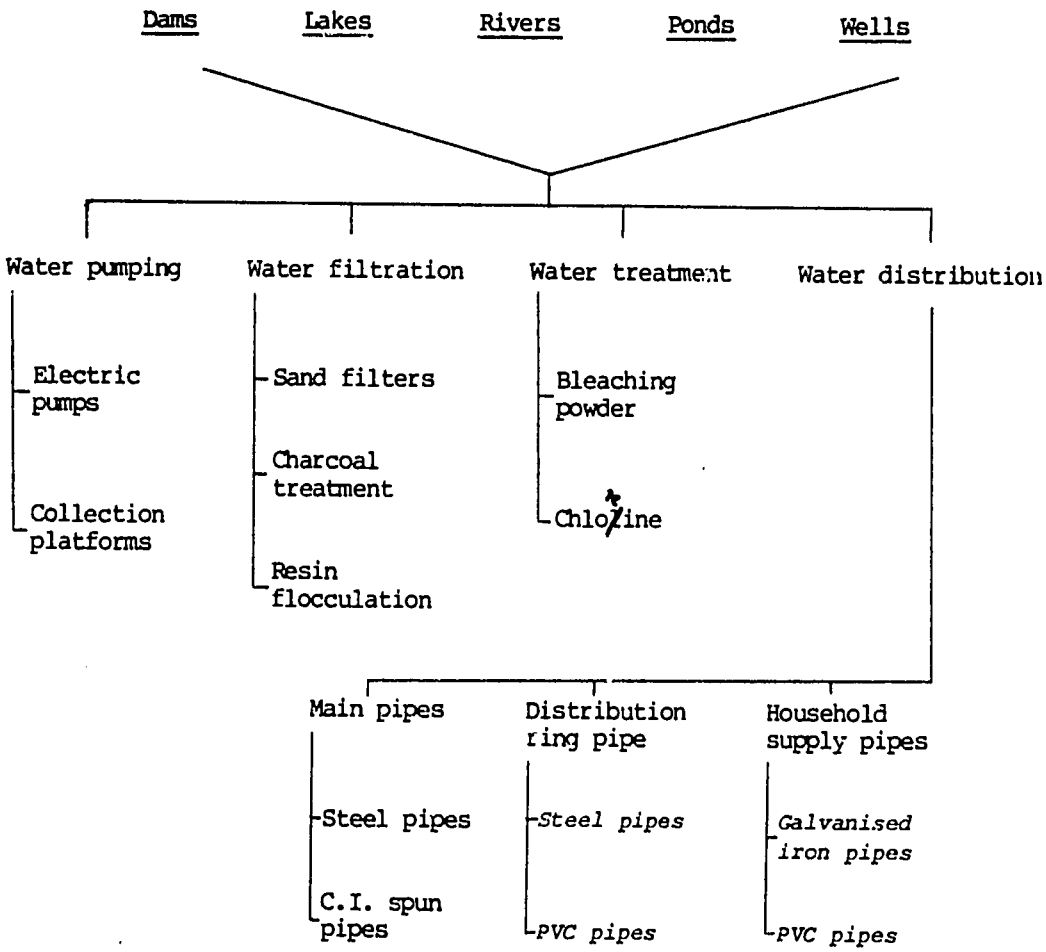
Stationery

- *Exercise books*
- *Chalk making*
- *Science laboratory apparatus*
- *Stationery items like pens, ink, footrule etc.*

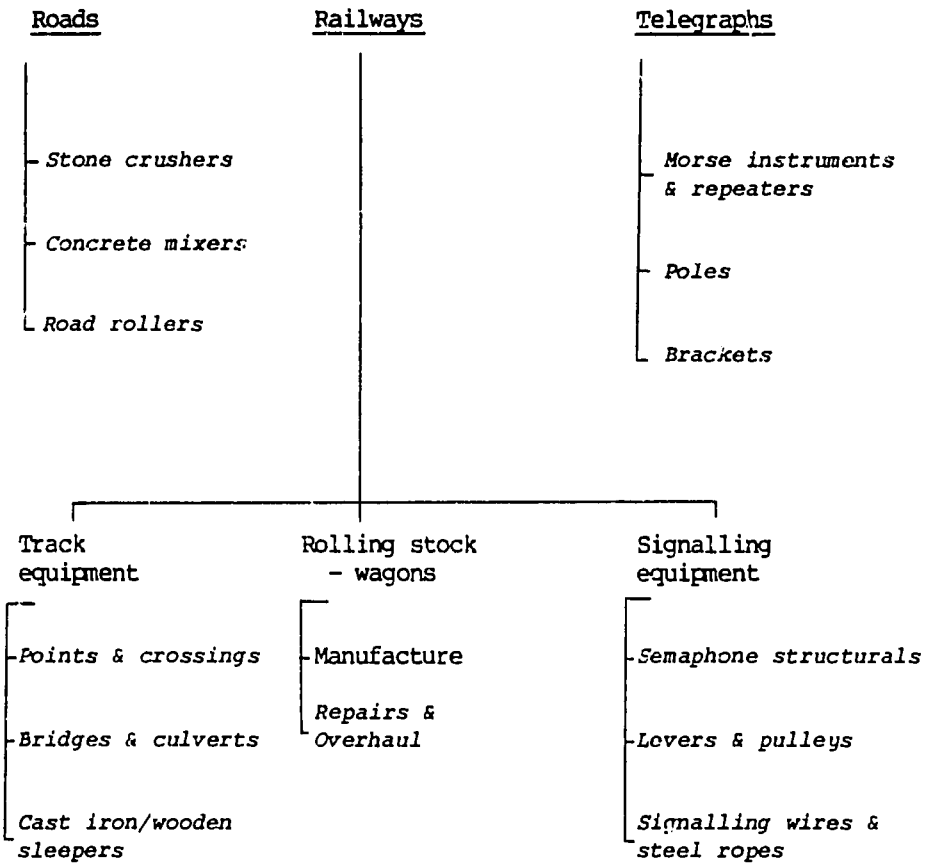
MEDICINES & PHATMACEUTICALS



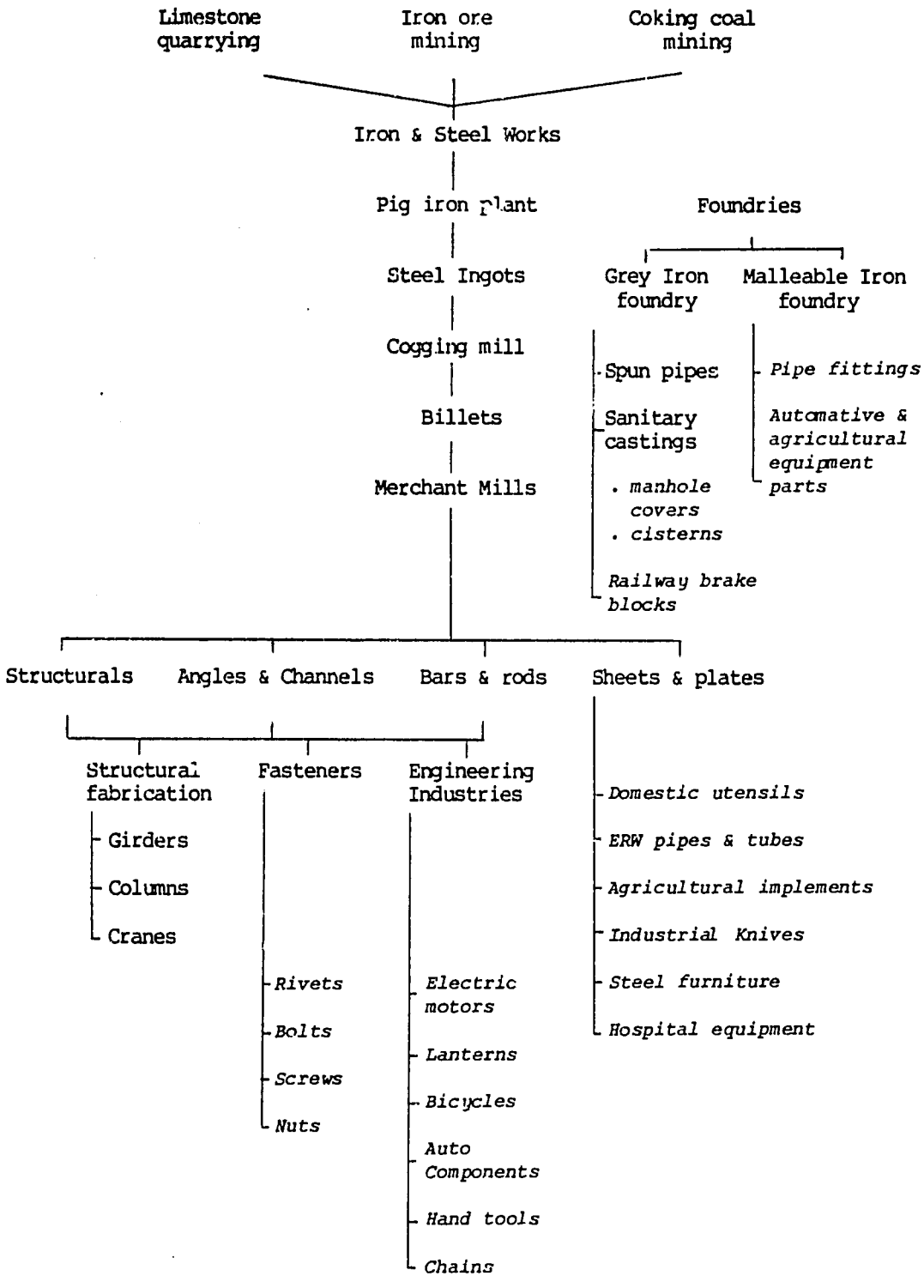
WATER SUPPLY



TRANSPORT AND COMMUNICATIONS



ENGINEERING ITEMS



ANNEX IV

IMPORTS FROM SOUTH AFRICA

An estimate of import dependence on South Africa may be derived from the following table of the Direction of Trade Flows in 1976.

	Total Value of Imports million U.S. Dollars	Value of Imports from South Africa	% Share of Total Imports
Angola[1]	614.3	60.8	9.9
Botswana	208.4	169.6	81.4
Lesotho	~~206.0~~ 206.5	194.1	94.0
Malawi	206.0	59.7	29.0
Mozambique	300.0	45.0	15.0
Swaziland	146.0	127.0	87.0
Tanzania	638.8	-	-
Zambia	714.1	-	-
Zimbabwe[2]	460.0	~~831.1~~ 174.8	~~23.0%~~ 38.0
Total	3494.1	831.0	23.8

Major Source: Yearbook of International Trade Statistics

1 - Figures & year to 1978

2 - Figures & year to 1977