OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.

DISCLAIMER

FAIR USE POLICY

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Tel: (+43-1) 26026-0 · www.unido.org · unido@unido.org

Distr.
LIMITED
UNIDO/IS.637
29 May 1986
ENGLISH

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

INDUSTRIAL DEVELOPMENT REVIEW SERIES

EGYPT

Prepared by
Regional and Country Studies

Preface

This series of industrial development reviews on developing countries is prepared within the framework of UNIDO country studies by the Regional and Country Studies Branch of the Division for Studies and Research.

The reviews provide a survey and brief analysis of the respective country's industrial sector, as an information service to relevant sections within UNIDO and other international agencies as well as aid agencies in developed countries concerned with technical assistance to industry. It is expected that the reviews will prove a handy, useful information source also for policy-makers in the developing countries as well as for industrial entrepreneurs, financiers and economic researchers.

The reviews draw primarily on information provided by the UNIDO data base and material available from national and international statistical publications. Since up-to-date national statistical data usually are not complete, it is evident that the reviews will need to be updated and supplemented periodically. To supplement efforts underway in UNIDO to improve the data base and to monitor industrial progress and changes on a regular basis, it is hoped that the appropriate national authorities and institutions in the respective countries and other readers will provide UNIDO with relevant comments, suggestions and information. Such response will greatly assist UNIDO in updating the reviews.

The present Review was prepared on the basis of information available at UNIDO headquarters in early 1986. It is divided into two rather distinct parts. Chapters 1 and 2 are analytical in character, giving first a brief overview of the country's economy and its manufacturing sector and then a more detailed review of the structure and development of its manufacturing industries. Chapters 3 and 4 contain various kinds of reference material on national plans and policy statements relevant to industrial development, on the more important governmental and other institutions involved in industrial development and on the country's natural, human and financial resources for industrial development. The Review also contains relevant basic indicators and graphical presentation of manufacturing trends as well as statistical and other appendices.

It should be noted that the reviews are not official statements of intention or policy by Governments nor do they represent a comprehensive and in-depth assessment of the industrial development process in the countries concerned.

CONTENTS

LIST OF TABLES

List of Tables in Appendix A

EXPLANATORY NOTES

Regional classifications, industrial classifications, trade classifications and symbols used in the statistical tables of this report, unless otherwise indicated, follow those adopted in the United Nations Statistical Yearbook.

Dates divided by a slash (1984/85) indicate a crop year or a financial year. Dates divided by a hyphen (1984-85) indicate the full period, including the beginning and end years.

References to dollars ($) are to United States dollars, unless otherwise stated.

In tables:

Three dots (...) indicate that data are not available or are not separately reported;
A dash (-) indicates that the amount is nil or negligible;
A blank indicates that the item is not applicable;
One dot (.) indicates that there is insufficient data from which to calculate the figure.

Totals may not add precisely because of rounding.

Basic indicators and graphical illustrations of manufacturing trends contained in this Review are based on data sourced from the UNIDO data base, international organizations and commercial sources.

The following abbreviations are used in this document:

CPDC	Centrally Planned Developed Countries
DRC	domestic resource cost
EEC	European Economic Community
EGPC	Egyptian General Petroleum Corporation
E£	Egyptian pound
GAIFZ	General Authority for Investment and Free Zones
GDP	gross domestic product
GNP	gross national product
GOFI	General Organization for Industrialization
ISIC	International Standard Industrial Classification
km	kilometre
LAB	Linear Alcohol Benzol
mt	metric ton
MVA	manufacturing value added
OAPEC	Organization of Arab Petroleum Exporting Countries
SITC	Standard International Trade Classification

THE ANALYSIS CONTAINED IN THIS REVIEW IS BASED ON INFORMATION AVAILABLE AS AT THE BEGINNING OF 1986.

BASIC INDICATORS 1
The economy

GDP: E£28.98 billion (1985) a/

Population: 48.5 million (mid-1985)
Labour force: 11.7 million (mid-1982)
GNP per capita: $700 (1983)

Annual average growth of GDP (per cent):

1960-70	1970-74	1974-80	1981	1982
6.0	1.9	9.4	13.9	8.7

1983	1984	1985 a/
6	6	5

Sectoral origin of GDP (per cent):

	1977	1984/85 b/
Agriculture	27.5	15.9
Petroleum	6.3	16.1
Industry and mining	15.1	13.2
Other	48.5	54.8

Inflation rate (per cent):

1980	1981	1982	1983	1984	1985
20.6	10.4	14.9	16.6	16.5	18

Currency exchange rate (Egyptian pound equivalents of $1):

1960	1974	1979	1982	1983	1984	1985	March 1986
2.8	2.5	1.43	1.43	1.19	1.19	1.26	1.80

a/ Preliminary estimate.
b/ Projected.

BASIC INDICATORS 2
Resources and transport infrastructure

Resources

Major agricultural commodities (1984): ('000 mt)	Cotton lint (390), maize (3,600), tomatoes (2,600), rice (2,540), wheat (1,815), root crops (175)
Livestock (1984): ('000 number)	Goats (1,500), cattle (1,450), pigs (15)
Oil and natural gas (1983/84): (total production)	4.2 million tons
Mineral production:	
iron ore production (1984)	129 million tons
phosphate rock production (1984)	1 million tons
natural sodium carbonate	4,000 tons/year (capacity)

Transport

Roads:	28,500 km
of which paved:	14,900 km
Railways:	3,900 route km
of which	
double track:	950 km
electrified:	25 km
Island waterways:	3,350 km
Ports:	Alexandria, Port Said, Port Tanfic
Airports:	Cairo, Alexandria, Luxor

BASIC INDICATORS 3
Foreign trade and balance of payments

Exports:	total value:	$4,500 million (1984/85)[a/]
	main goods:	oil, cotton, textiles and clothing, aluminium ingots, fruits
	main destinations:	Italy, Great Britain, Federal Republic of Germany, U.S.A., Japan, CPDC
Imports:	total value:	$9,500 million (1984/85)[a/]
	main goods:	wheat, flour, maize, tobacco, oil products, dairy products, wood, cement, reinforcing iron bars, chemicals and condensation products, fats and vegetable oils, medicines, motor cars, t.v. sets and parts, vehicles, machinery for excavation and levelling, electrical machinery
	Main origins:	U.S.A., Federal Republic of Germany, Italy, France, Japan, U.K., Romania, USSR
Trade deficit:		$6 billion (1985)[a/]
Balance of payments: (current account deficit)		$1.3 billion (1985)[a/]
Gross reserves minus gold:		$736 million (1984)
Short-term external debt:		$7.0 billion (end March 1986)[a/]
Debt service ratio: (service obligations as per cent of exports of goods and services)		35 per cent (1985)[a/]

a/ Estimates.

BASIC INDICATORS 4
The manufacturing sector

Manufacturing value added:	$5,501 million (1984)[a/]				
MVA per capita:	$114 (1984)[a/]				
Employment in manufacturing as a percentage of total labour force:	1,423,200 persons (1981/1982) 12.1 per cent				
Annual average growth of MVA: (per cent)	1960-70	1970-74	1974-80	1981	1982
	6.3	1.1	8.2	10	8.2
			1983[a/]	1984[a/]	
			7.7	5.4	
Sectoral composition of MVA:		1973		1982	
mainly consumer goods		55.7		45.2	
mainly intermediate goods		21.3		29.5	
mainly capital goods		23.0		25.3	
Trade in manufactures[b/] (1982):					
Total value - Exports	$253 million				
Imports	$5,409 million				
Share of Manufactures[b/] (1982):					
in total exports	8.1 per cent				
in total imports	60.0 per cent				

a/ Estimates.
b/ SITC 5-8 less 68.

BASIC INDICATORS 5
Trade in manufactured goods

In 1982

MANUFACTURED EXPORTS — total value: U.S.$253 million[a/]

Principal manufactured exports	($ million)	Destination (in per cent)				
		Developing countries	Developed market countries			Centrally planned economies
			USA	EEC	Japan	
Textiles						
Textile yarn & threads	124.4	6.8	1.5	39.9	0.0	51.7
Woven cotton fabrics	22.6	20.2	15.9	39.6	0.0	22.1
Clothing excluding leather	13.1	19.1	7.3	48.1	0.1	23.3
Made up fabrics mainly textiles	9.5	19.7	0.3	20.1	0.0	59.0
Aluminium	115.6	11.1	0.0	85.8	1.6	0.0
Iron and Steel						
Universal plates & sheets	6.7	30.2	0.0	64.2	0.0	0.0
Chemicals						
Medicinal & pharmaceuticals	8.3	97.1	1.7	1.2	0.0	0.0
Organic chemicals	2.4	8.2	2.0	62.9	6.8	0.0
Leather Products						
Travel bags and hand bags	1.6	23.0	1.5	5.4	0.0	0.0
Footwear	2.3	99.6	0.4	0.0	0.0	0.0

MANUFACTURED IMPORTS — total value: U.S.$5,409 million[a/]

Principal manufactured imports	($ million)	Origin (in per cent)				
		Developing countries	Developed market economies			Centrally planned economies
			USA	EEC	Japan	
Commercial road vehicles	597.8	5.2	5.9	38.2	7.1	4.3
Lime, cement fabricated building material	364.3	3.9	1.0	1.7	0.3	25.4
Vegetable oils & fats	146.6	4.0	30.5	38.1	0.0	0.0
Bars, Rods, shapes & sections	270.6	11.8	2.5	25.7	0.8	43.9
Wood shaped or simply worked	271.4	3.0	1.7	1.1	0.1	21.3
Passenger motorcars	258.3	13.7	0.8	66.2	1.4	4.2
Petroleum products	208.9	7.1	2.7	56.9	0.0	0.0

a/ SITC 5-8 less 68.

BASIC INDICATORS 6

Inter-country comparison of selected indicators

	Unit	Algeria	Brazil	Egypt	Ghana	Nigeria	Pakistan	Zimbabwe
I. Demographic indicators								
Population (mid 1983)	million	20.6	129.7	45.2	12.8	93.6	89.7	7.9
Population growth (1973-83)	per cent per annum	3.1	2.3	2.5	3.1	2.7	3.0	3.2
Infant mortality (1983)	per thousand	107	70	102	97	113	119	69
Area	thousand km^2	2,382	8,512	1,001	239	924	804	391
Density (1982)	persons per km^2	9	15	45	54	101	111	20
II. Economic indicators								
GDP (1983)	$ million	47,200	254,660	27,920	3,720	64,570	25,880	4,730
GNP per capita (1983)	$	2,320	1,880	700	310	770	390	740
GDP growth (1973-83)	per cent per annum	4.5	4.8	8.8	-1.3	1.2	5.6	1.8
Agriculture (1983)	per cent of GDP	6	12	20	53	26	27	11
Industry (1983)	per cent of GDP	54	35	33	7	34	27	32
Manufacturing (1983)	per cent of GDP	13	27	13.9a/	4	5	19	21
Services (1983)	per cent of GDP	40	53	47	40	40	46	57
Exports of goods and non-factor services (1983)	per cent of GDP	30	9	32	2	19	21	...
Gross domestic investment (1983)	per cent of GDP	37	21	28	8	19	17	22
External public debt (1983)	per cent of GNP	28.0	29.3	49.4	28.3	17.7	31.3	27.9
III. Industrial indicators								
MVA (1982)	million $ at constant 1975 prices	3,643	43,300	4,847	198	4,049	2,967	925
Growth of MVA (1973 83)	average annual per cent	12.6	4.2	2.1b/	-1.5c/	10.7	7.0	6.0c/
MVA share in world manufacturing value added (1981)	per cent	0.09	2.41	0.18	0.03	0.18	0.17	0.05
Share of manufactured exports in total exports (1982)	per cent	0.17d/	33.32	8.1	1.27e/	2.07e/	57.45	12.54f/

a/ 1981/82.
b/ 1975-82.
c/ 1970 81.
d/ 1980.
e/ 1979.
f/ 1981.

Executive Summary

The Egyptian economy registered an average annual growth rate of 6 per cent during 1983 and 1984. Growth of GDP for 1985 has been estimated at 5 per cent compared with a target of 8.5 per cent set in the Five-Year Plan, 1982/83-1986/87. The estimated MVA growth rate of 5.4 per cent in 1984 was well below the targeted annual growth rate of around 10 per cent during the current Plan. The performance of the Egyptian economy in recent years has thus fallen short of the growth targets envisaged in the current Five-Year Plan. Egypt's development efforts are constrained by a sudden downturn in the main sources of foreign exchange earnings. As a result of the oil price slide in 1986, the country is facing a loss of close to $1 billion in oil export revenues or 8.8 per cent of all current account receipts. Egypt's other main sources of hard currency, notably tourism, Suez Canal dues and remittances from Egyptian expatriate workers, have been falling in recent years.

With a major shift in economic policy in 1974, from nationalization and creation of a dominant public sector to liberalization efforts and the adoption of open-door policies, the Egyptian economy experienced a radical transformation in economic structure. Rapid economic growth experienced by the economy until 1981/82 was based on the expansion of the petroleum, service and Suez canal sectors as well as a large inflow of expatriate worker remittances.

Agriculturally-based industries like textiles and food processing form a major part of the manufacturing activity in Egypt. Basic industries are mostly in the public sector and the private sector concentrates on activities that can be carried out by small-scale firms, such as garments, wooden furniture, food products, leather products, cosmetics and fabricated metal products. The manufacturing sector grew at an annual average rate of 8.2 per cent in the second half of the 1970s. This high pace of industrial growth was sustained until 1982. The current rate of industrial growth does not seem to keep pace with the rapidly growing domestic demand, partly due to a wide range of subsidies which account for cost and price distortions.

The shares of food products and textiles in total MVA declined and that of petroleum refineries, chemical products and products of basic industries increased during 1973-1982. Contrary to the trend in many oil producing countries, Egypt's refining capacity is being expanded. The country's marked

increases in energy consumption is being encouraged by subsidized prices. Rapid growth of the fertilizer industry was the major contributing factor for the expansion of the chemical industry. Egypt is self-sufficient in certain chemical products. Investments in basic industries seem to have augmented capital- and energy-intensiveness.

Total factor productivity as a source of growth in public sector firms ranges from 55 per cent in edible oils and fertilizers to 11 per cent in iron and steel manufactures. On the other hand, total factor productivity served as a negative source of growth in cotton, rubber, plastic and glass products. Total factor productivity was the principal source of industrial expansion during 1973-79 in many public sector firms. However, output increases were largely due to the removal of major supply constraints, leading to better utilization of existing capacities . Industrial productivity indicators show that the private sector has performed better than the public sector. The major distortions causing inefficiencies are multiple exchange rates, price controls, subsidies and interventions. Recently the Government initiated a series of measures to remove numerous interventions that constrain the performance of the public sector.

The share of manufactured exports (SITC 5-8 less 68) in total exports declined significantly from 25.4 per cent in 1973 to 8.1 per cent in 1982. The export structure is becoming more concentrated rather than diversified. Domestic demand absorbs a large proportion of increased output. A relatively high rate of growth of population coupled with a rise in per capita income, however, also keeps an upward pressure on imports. The share of manufactured imports in total imports rose from 56.7 per cent in 1973 to 60.0 per cent in 1982. Egyptian industry in both public and private sectors imported roughly $1.2 billion worth of raw materials and inputs in 1985.

The ambitious targets envisaged in the current Five-Year Plan (1982/83-1986/87) face challenges exacerbated by the overall sluggish economic environment. Economic policy is being directed towards broadening the industrial base by encouraging the participation of the private sector in industrial investment, especially in the basic needs industries. Growth prospects in the short run are linked to the country's dependence on external sources of foreign exchange. Egypt's long-term growth prospects depend crucially on economic policy reforms that aim at mending the sources of distortions.

1. THE EGYPTIAN ECONOMY

1.1 Recent economic trends

Real GDP grew at 6 per cent in 1983 and 1984. Preliminary estimates for 1985 reveal a growth rate of 5 per cent in 1985. The high pace of economic growth generated during the second half of the 1970s could not be sustained since 1982 - mainly as a result of depressed invisible earnings. The performance of the Egyptian economy in recent years has thus fallen short of the target of 8.5 per cent envisaged in the current Five-Year Plan ending 1986/87.

The open-door and liberalization policies, adopted in 1974, were designed to encourage inflows of foreign capital and to promote private enterprise. The expansion of oil production and gas resources in conjunction with the quadrupling of oil prices, the large inflow of expatriate worker remittances, the reopening of the Suez canal and a steady stream of revenue from tourism were the main factors ushering in a period of rapid growth in the second half of the 1970s. By the end of the 1970s these factors had set in motion a set of economic interactions that resulted in around 14 per cent growth in real GDP in 1981.

The ambitious growth target of 8.5 per cent a year envisaged in the current Five-Year Development Plan (1982/83 to 1986/87) could not be achieved. The current deteriorating economic circumstances make it impossible to envisage such growth rate. Remittances from more than 3 million Egyptian workers abroad fell more than 50 per cent from $3.5 billion in 1984 to $1.6 billion in 1985. By the end of 1985 around 40,000 expatriates returned and those holding jobs abroad have taken big pay cuts. Between 10 and 15 per cent of Egyptians employed abroad are obliged to return home because of the economic squeeze in oil producing countries following the decline in oil prices in early 1986. The sharp downturn in inflow of remittances adds to hard currency problems. Egypt's total disbursed civilian debt totalled $32.5 billion in 1985 and short-term claims were expected to be around

$7,000 million. The cost of servicing this debt is put at about 35 per cent of the total current account receipts. According to recent estimates, debt-servicing may absorb 39 per cent of dollar receipts by 1989.

A major problem stems from the question of whether the earnings from the petroleum sector can be maintained in the face of the highly subsidized domestic price of oil - which reduces the exportable surplus - and a large degree of uncertainty caused by the oil glut and falling prices. The current oscillation of oil prices on the world market, coupled with a 12 to 15 per cent annual rise in domestic consumption, affects oil export revenues at a time when the Government is facing difficulties in augmenting foreign exchange receipts to meet debt obligations. A drop in the average price of oil from $27 to $15 a barrel could result in $984 million loss of oil export revenues for Egypt. Expressed as a percentage of all current account receipts, the country's loss of oil revenues would be around 8.8 per cent.[1/] At the present rate of exploration Egypt's oil and gas reserves will last another 12 years. However, the discovery of oil and natural gas in Western Desert during 1985 provides a new potential base. Western oil companies are preparing to begin production from the new field. The costs of this onshore production are relatively low.[2/]

The large food import bill of $3 billion is a big burden on the economy. With population growing at around 2.5 per cent a year against 2 per cent annual growth rate of agricultural output these imports are expected to grow. Despite restrictive measures on imports, the trade deficit for 1984/85 reached $6 billion. The balance-of-payment deficit was around $1.3 billion in 1985.

The decline in foreign exchange earnings in the context of the current slump in oil prices has injected a new note of urgency into the negotiations with the IMF for a standby facility of some $1.5 billion. The IMF is urging Egypt to unify its various official exchange rates and to adjust them towards

---

1/ IMF Survey, March 17, 1986, p. 85.

2/ The operating costs are roughly estimated at $3 to $5 a barrel against $12 to $15 for North Sea oil. It appears to be profitable even under today's market conditions. For details, see Financial Times, March 25, 1986, p. 20.

the open market value of the Egyptian pound, and to introduce substantial reform of the country's food and energy subsidies. The prices of almost all basic commodities, fuel and power are currently well below world levels on account of Egypt's pricing and subsidy policies.

Egypt's public sector accounts for some three-quarters of industrial output, 80 per cent of investment, 58 per cent of employment and 66 per cent of value added in industry. Price controls as well as administrative restrictions continue to create inefficiencies and limit the ability of the public sector to generate investment resources.

The open-door policy launched in 1974 was in stark contrast to nationalization of enterprises in the early 1960s. The new policy undoubtedly contributed to revitalizing the private sector and to streamlining investment procedures to attract foreign investment. In an effort to expand the automotive industry, several foreign companies have been granted approval to establish plants. The El-Dikheila steel works, costing around $840 million is to begin commercial operations in 1986, with an output capacity of around 350,000 tons a year.

The budget for 1984/85 set total expenditure at E £182 billion, an increase of more than 12 per cent over 1983/84. The cost of food subsidies represents a 22 per cent increase, whilst investment expenditure has been raised by 10 per cent. The net budget deficit was around E £1.2 billion during 1984/85. The budget for 1985/86 attempts to squeeze the increase in expenditure below 10 per cent. As part of an austerity drive initiated in April 1986, government expenditures are to be reduced by E £300 million.

1.2 Economic structure

Egypt's population was estimated at 48.5 million in mid-1985. The rate of growth of population is relatively high (2.5 per cent). With a GNP per capita of $700 in 1983, Egypt is classified as a "middle-income" economy. The economy grew at an annual average rate of 6 per cent in the 1960s. Growth averaged 3 per cent a year during the late 1960s and early 1970s.

A radical transformation of economic structure took place in the second half of the 1970s. With the emergence of petroleum and gas as dominant resources, the share of petroleum in GDP expanded rapidly from 6.3 per cent in 1977 to 18.5 per cent in 1980/81. The shares of both agriculture and industry declined markedly. Though this pattern of structural transformation is typical of an oil exporting economy, in Egypt's case it partly reflects price and output controls in agriculture and industry which shifted economic activity to construction, trade and finance.

Table 1 shows the sectoral distribution of GDP during 1977-1984/85. Industry and mining together accounted for 15.1 per cent of GDP in 1977. After falling to 12.4 per cent in 1980/81 it began to pick up again during 1981/82-1982/83. The increase in its share of GDP could not be sustained thereafter. Apart from oil and gas, mineral industry continues to be relatively small in Egypt. Only iron ore and phosphate rock are available in significant quantity.

Despite the declining share of agriculture in GDP, this sector generates approximately 40 per cent of employment. The labour force has been increasing by about 400,000 a year. Labour force surveys have indicated that recent growth in non-agricultural production has not been matched by similar growth in employment. In 1981/82 the manufacturing sector accounted for 12.1 per cent of total employment. Egypt's public sector is a major employer of industrial labour force. Government services absorbed 2.3 million persons by 1981/82, accounting for nearly 20 per cent of total employment.

Table 1. Sectoral origin of GDP, 1977-1984/85
(percentage)

Sector	1977	1980/81	1981/82	1982/83[a/]	1983/84[a/]	1984/85[b/]
Agriculture	27.5	20.6	19.8	18.8	16.6	15.9
Petroleum	6.3	18.5	15.0	16.6	15.9	16.1
Industry and mining	15.1	12.4	13.6	13.6	13.1	13.2
Other	51.1	48.5	51.6	51.0	54.4	54.8

Sources: Ministry of Planning; Central Bank of Egypt, Annual Report, various issues.

a/ Estimates.
b/ Projected.

The share of national savings in GDP rose from 10 per cent in 1974 to 20 per cent in 1980/81. Investment rose from 23 per cent to 30 per cent of GDP during the same period, slightly reducing the savings-investment gap. Investment in petroleum and electricity grew more rapidly than in other sectors. According to recent estimates, real investment grew at 2.9 per cent annually during the first two years (1982/83 and 1983/84) of the current Five-Year Plan, well below the 10.5 per cent Plan target. While investment has fallen short of the Plan's expectations, domestic savings effort has not shown any significant improvement.

Egypt's principal exports are oil and oil-related products, cotton, textiles and aluminium. Petroleum and related products constitute nearly 70 per cent of total exports. Exports are destined mainly to the developed countries. Italy is one of the main destinations, accounting for more than 18 per cent of Egypt's total exports. Transport equipment, machines, livestock, food products, chemicals, rubber, leather, wood, paper and basic metals are the principal imports. The main origins of imports are the developed market economies. The USA and Federal Republic of Germany supply more than 25 per cent of Egypt's imports.

1 3 Overview of the manufacturing sector

Egypt's basic industries - iron and steel, aluminium, fertilizer, heavy engineering and cement - and cotton yarn are mostly in the public sector as a consequence of the nationalization of industries in the early 1960s. The private sector concentrates on activities that can be carried out by small-scale firms, such as garments, food products, leather products, cosmetics, wooden furniture and fabricated metal products. Agriculturally-based industries like textiles and food processing form a major part of the industrial activity in Egypt.

Egypt's refineries processed 20.4 million tons of crude oil in 1984/85, compared with 18.6 million tons in 1983/84 and 17.7 million tons in 1982/83. The branch produced 19.4 million tons of refined products in 1984/85 - an increase of 10.2 per cent over the previous year.[1/] Contrary to the trends

---

1/ Arab Oil and Gas, 16 June 1985.

in other oil producing countries, Egypt's refining capacity is being expanded and a $1 billion three-year investment plan has been approved. A new refinery is being built at Asyut in Upper Egypt - first in the region and seventh in the country. A subsidiary of the Egyptian General Petroleum Corporation (EGPC) has awarded a contract worth over $70 million to Snamprogetti of Italy for the construction of a 40,000 ton/year Linear Alcohol Benzol (LAB) plant at its Ameriyah Complex near Alexandria.

The textile industry is one of the country's oldest industries, processing long-staple and extra-long-staple cotton. However, the industry is increasingly using synthetic fibres, particularly polyester, to boost high-grade cotton exports. Currently the textile industry as a whole accounts for around 18 per cent of MVA. Large public sector firms produce more than 80 per cent of the total output (spinning and weaving). According to recent estimates, Egypt will need to spend $1.8 billion in renewing its aging textile industry.[1/]

Nearly 40 per cent of locally produced selected fruits and jams are exported, mostly to the Arab world. Processing of Egypt's traditional exports are encouraged. Egypt seems to enjoy comparative advantage in the production of food flavours, vegetable oils, jams and marmalades, biscuits, confectionery and starch. Yet Egypt is not self-sufficient in food production, except in rice. Half of its foodstuffs, particularly wheat, wheat flour, frozen beef, frozen chickens and edible oils are being imported. The rapidly rising population with higher disposable incomes seems to provide the stimulus for the continuing growth of the construction industry.

The aluminium industry in Egypt employs excessively subsidized energy inputs. A World Bank-sponsored study recommended the closure of the Nag Hammadi Smelter in Upper Egypt which consumes about 14 per cent of total electricity generated nationwide.

Egypt's pharmaceutical industry, the most advanced in the Middle East, achieved a sales turn-over of $800 million in 1985. The medical equipment

---

1/ Business International, "Middle East Forecasting Study, 1984-1988," September 1984.

market has grown at an average rate of 20 per cent in the first half of the 1980s.

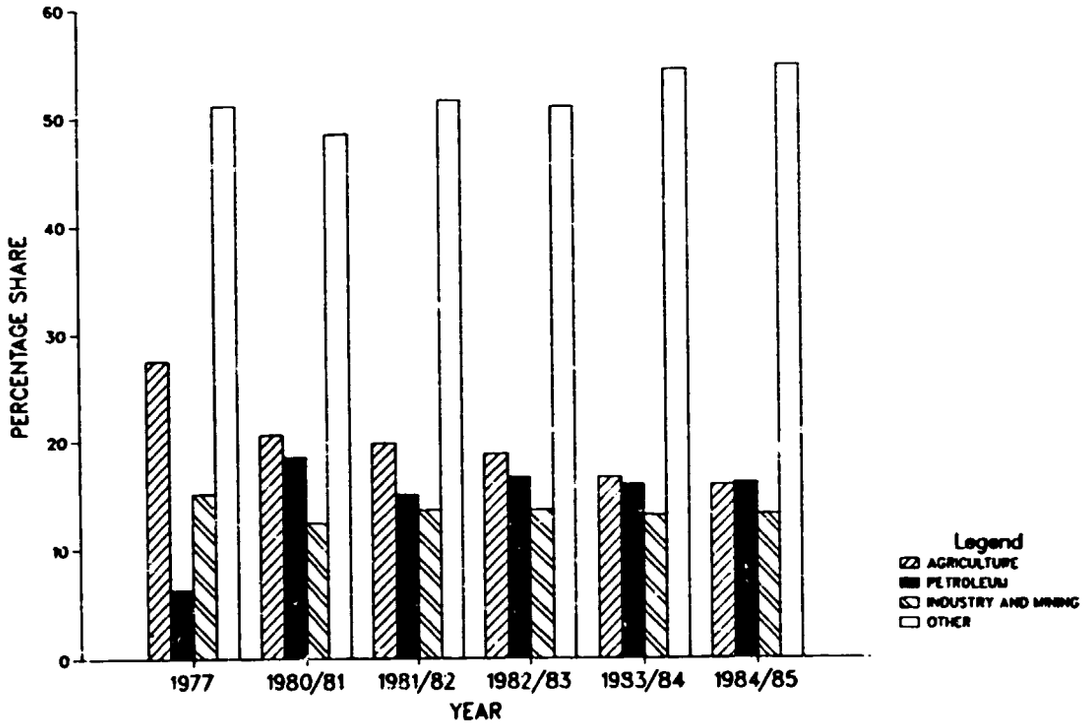
Recently Egypt has changed its strategy for its auto industry. Production will be confined to only two models and opportunities will be sought for joint ventures in component manufacture. Egypt has approved in principle a $1,000 million proposal by General Motors of the US to build cars in Cairo. There is a plan for a new tyre plant with a capacity of 1 million radials annually.

Egypt has a significant nitrogen fertilizer industry. The installed capacity increased from 741 million tons of ammonia a year in 1980 to 1,136 million tons a year in 1982. No further expansion took place during 1982-85. It is foreseen that the Egyptian designed capacity of ammonia production will be raised to 1,466 million tons per year in 1990.[1/]

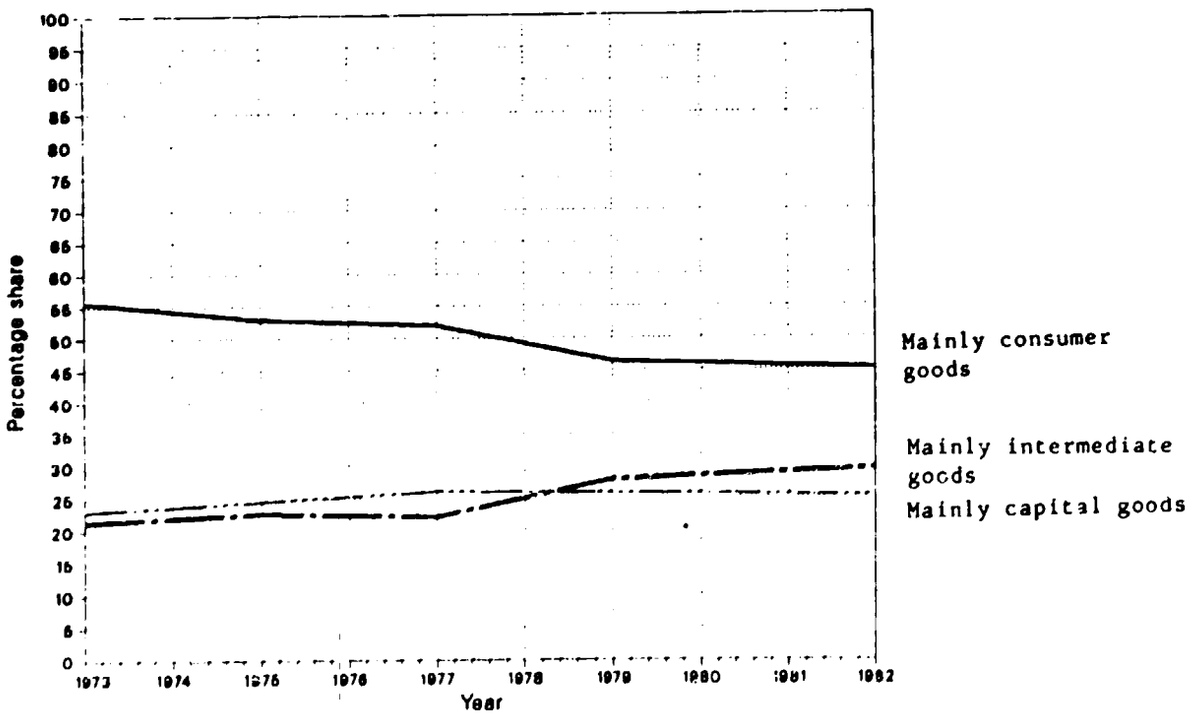
1/ Oil and Arab Cooperation, "The Petrochemical Industry," Vol. 11, No. 1, OAPEC, 1985.

MANUFACTURING TRENDS

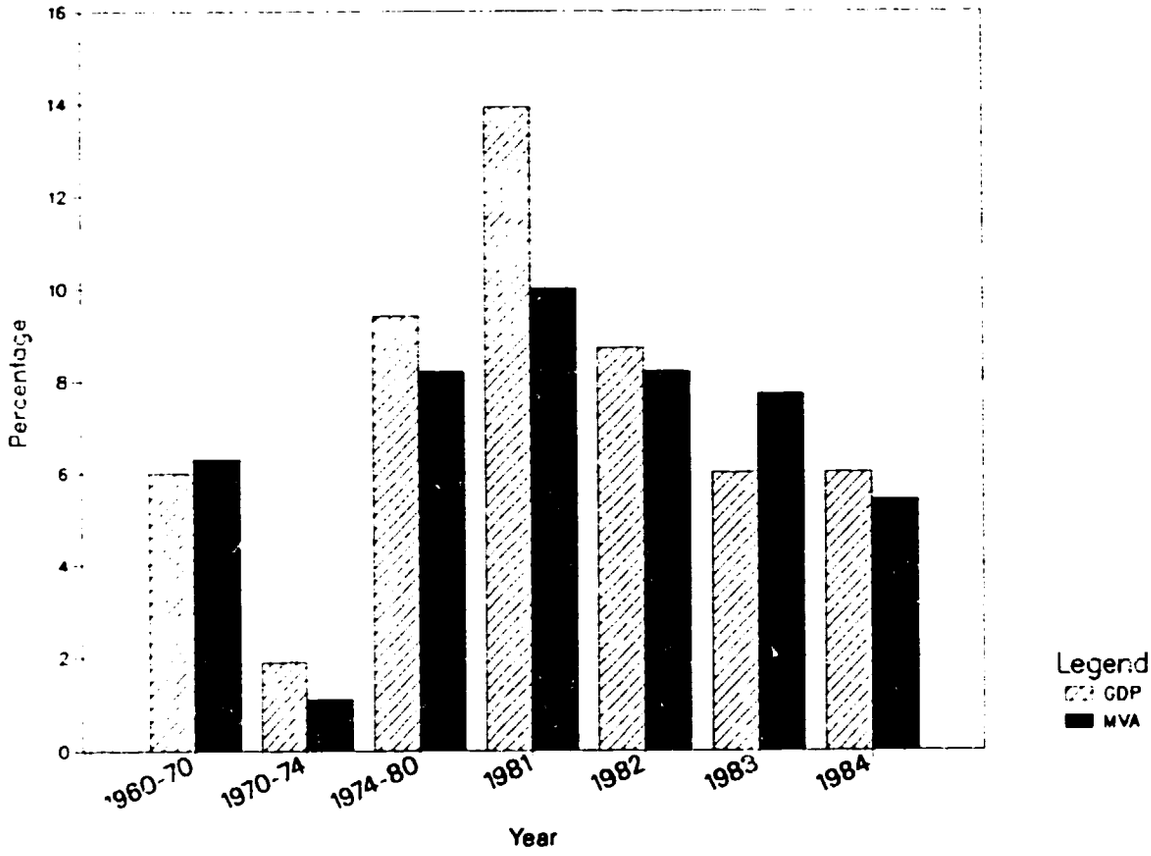
DISTRIBUTION OF GDP BY SECTOR OF ORIGIN, 1977–1984/85



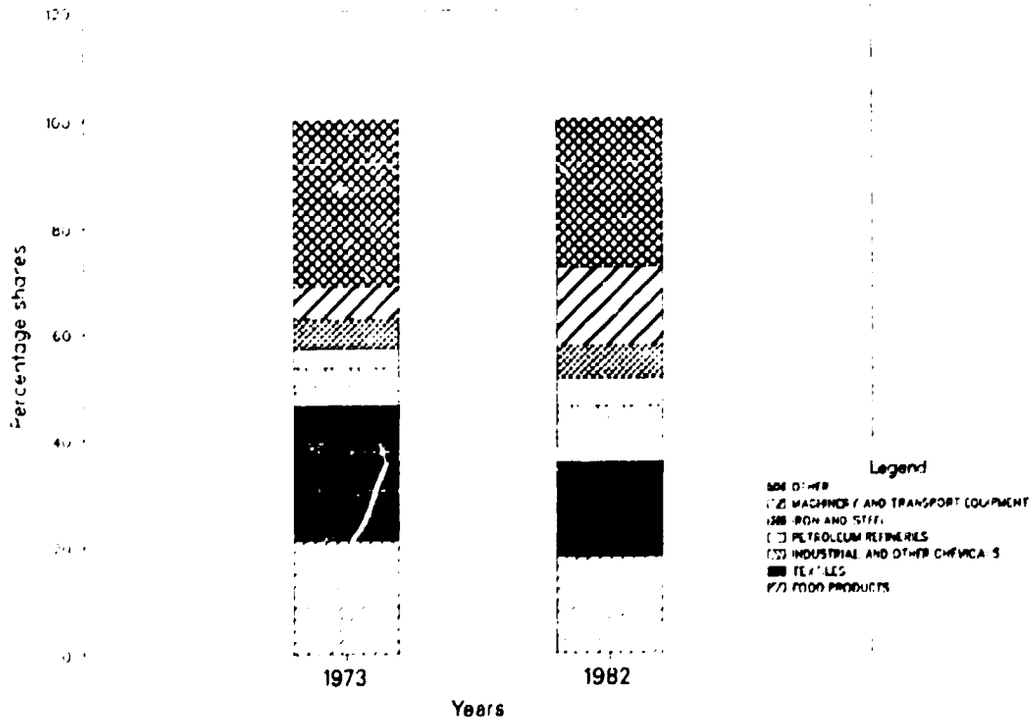
COMPOSITION OF MVA BY END USE, 1973-1982



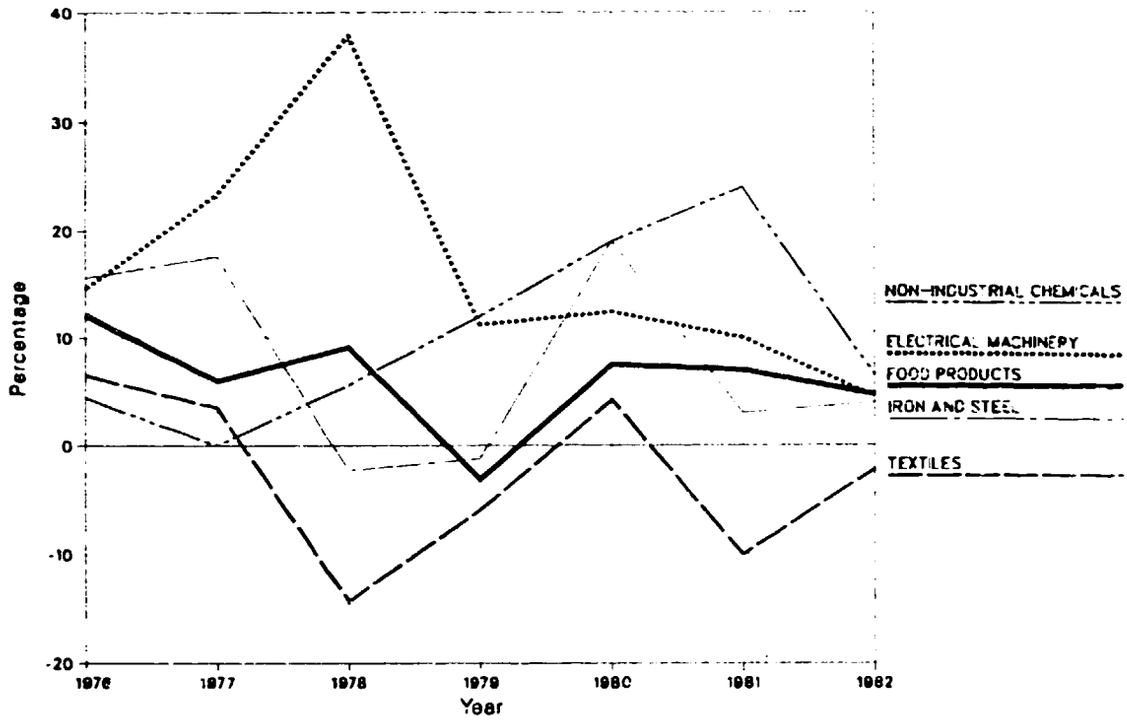
ANNUAL GROWTH RATES OF GDP AND MVA, 1960-1984



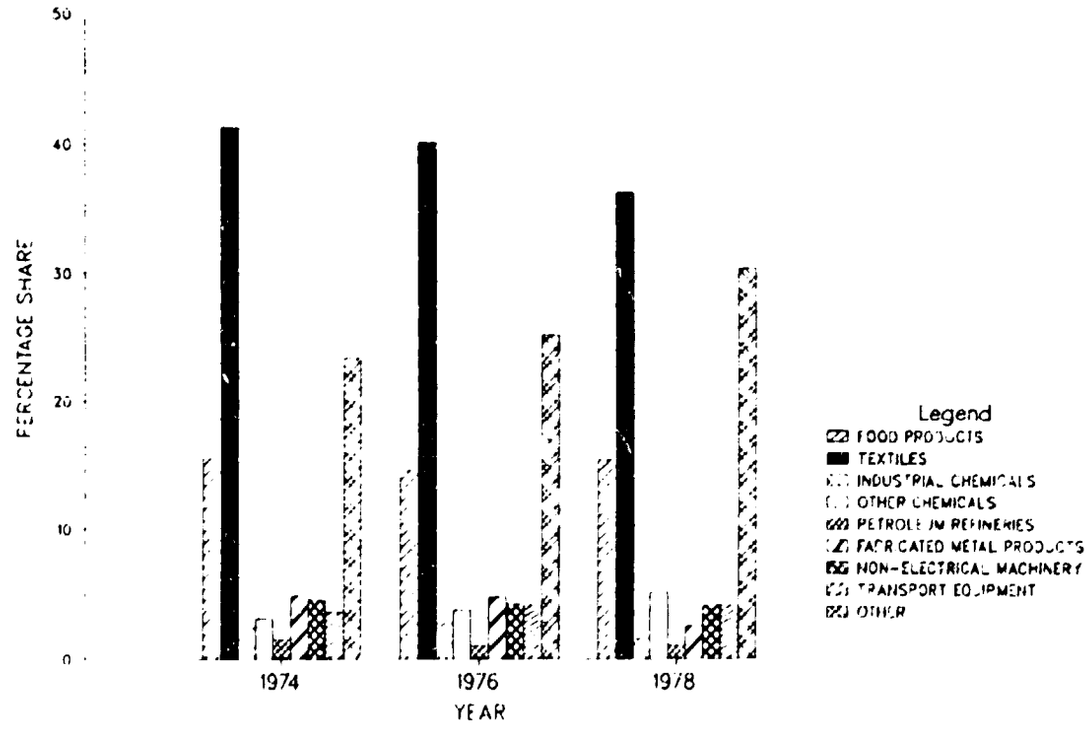
COMPOSITION OF MVA BY MAIN BRANCHES, 1973 AND 1982



ANNUAL GROWTH RATES OF MVA, SELECTED INDUSTRIES, 1976-1982
(at constant 1980 prices)

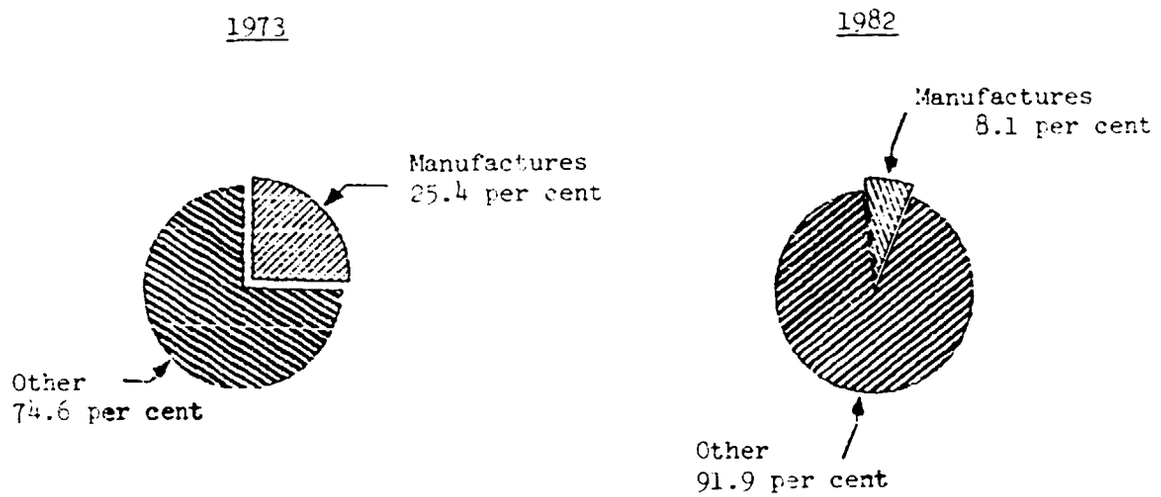


STRUCTURE OF MANUFACTURING EMPLOYMENT, 1974, 1976 AND 1978

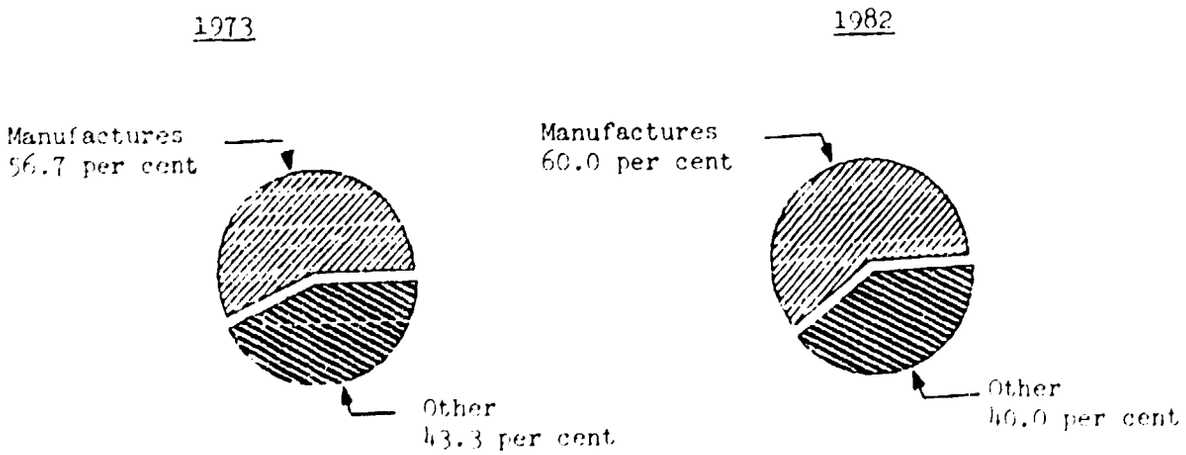


SHARE OF MANUFACTURED EXPORTS IN TOTAL EXPORTS, 1973 AND 1982

(SITC 5-8 less 68)

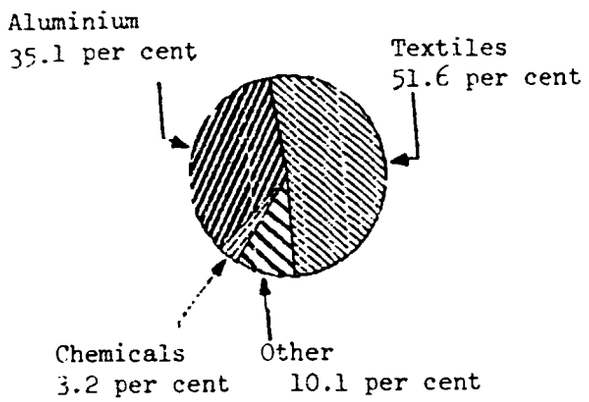


SHARE OF MANUFACTURED IMPORTS IN TOTAL IMPORTS, 1973 AND 1982
(SITC 5-8 less 68)

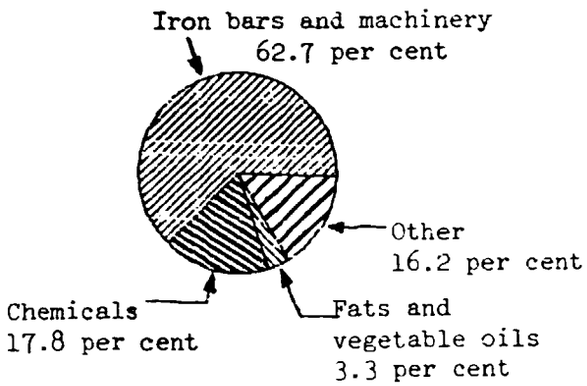


COMPOSITION OF MANUFACTURED EXPORTS AND IMPORTS IN 1982

MANUFACTURED EXPORTS

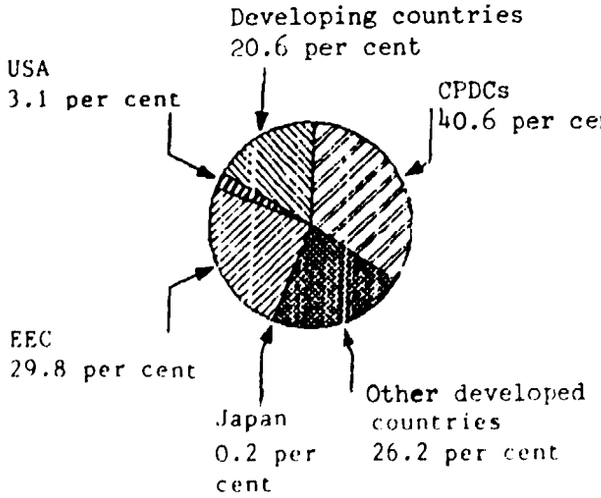


MANUFACTURED IMPORTS

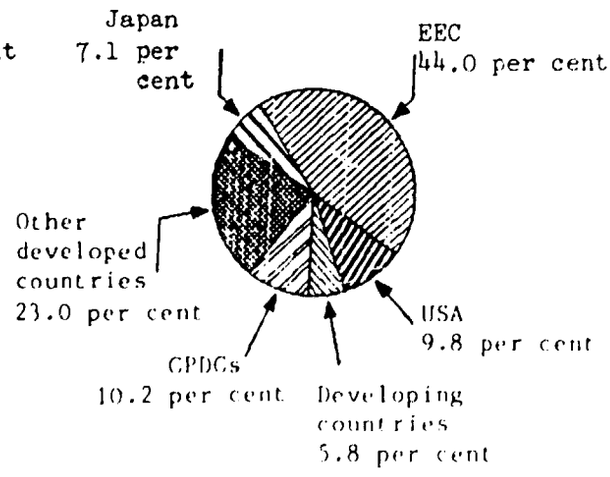


DESTINATION AND ORIGIN OF MANUFACTURED EXPORTS AND IMPORTS, 1982

MANUFACTURED EXPORTS



MANUFACTURED IMPORTS



2. STRUCTURE AND PERFORMANCE OF THE MANUFACTURING SECTOR

2.1 Growth and structural change

The manufacturing sector grew at an annual average rate of 6.3 per cent (at constant 1975 prices) in the 1960s. During 1970-74 growth of manufacturing value added (MVA) stagnated and averaged 1.1 per cent annually. With the introduction of liberalization efforts coupled with an unprecedented expansion in the financial resource base, manufacturing activities (including oil refining) received fresh impetus and grew at an annual average growth rate of 8.2 per cent in the second half of the 1970s. The high tempo in growth was sustained until 1981/82.

The envisaged growth rate of around 10 per cent for the industrial sector during the current Five-Year Plan covering the period 1982/83-1986/87 appears to be a difficult task because of challenges exacerbated by the sluggish overall economic environment. Against the backdrop of imperfect data on industrial growth in recent years, the soaring imports may be taken as an indication of the industrial sector failing to keep pace with domestic demand. To generate high industrial growth, policy is being directed towards broadening the country's industrial base by promoting investment from Egyptian and foreign sources.

As a consequence of the nationalization of industries in the early 1960s, some two hundred large public sector firms dominate the industrial sector. Since the introduction of liberalization policy in 1974, private industry has grown rapidly, at an annual average rate of 12 per cent, compared with an annual average growth rate of 7 per cent achieved by the public sector during 1974-80.

In general the industrial sector expanded at a high rate during the second half of the 1970s. Petroleum and coal products registered an annual average growth rate of 28.6 per cent during 1973-80. Machinery industry (electrical and non-electrical) recorded above 20 per cent annual growth rate. Growth of transport equipment, furniture (except metal) and wearing apparel (except footwear) exceeded 10 per cent per annum. Industrial and other chemicals also grew significantly. Textiles and a few consumer goods suffered negative growth rates during 1973-81.

The physical output statistics for selected industrial products presented in Table 2 suggest divergent trends during 1981-83. Output of car tyres and tubes dropped sharply from 2.4 million tonnes in 1981 to 1.9 million tonnes in 1982, but recorded a 51.6 per cent increase in 1983. Cotton fabrics, sugar, fertilizers and cement registered two-digit growth rates in terms of physical output in 1983. Dairy products, phosphates, iron ore and cotton yarn suffered declining volumes of output in the same year. While production of cotton fabric was on a generally upward path, with a net increase of 46,000 tonnes during 1981-83, output of cotton yarn declined sharply in 1983 after showing a hint of stagnation in 1982. The textile industries group of companies under the Ministry of Industry envisaged a production target of E £2.07 billion for 1986/87. It implies a higher growth rate of the textile industry than the target set for industry as a whole. Rehabilitation of the major spinning and weaving companies could play a significant role in achieving this ambitious target.

Table 2. Output of selected industrial products, 1981-1983

('000 tonnes)

Industrial product	1981	1982	Percentage change 1982/1981	1983	Percentage change 1983/1982
Phosphates	737	691	-6.2	629	-9.0
Iron ore	1,944	2,139	10.0	2,000	-6.5
Dairy products	214	377	76.2	324	-14.1
Sugar	619	630	1.8	720	14.3
Cotton yarn	239	245	2.5	229	-6.5
Cotton fabric	170	180	5.9	216	20.0
Car tyres and tubes	2,448	1,901	-22.3	2,882	51.6
Fertilizers	3,820	4,570	19.6	5,136	12.4
Cement	3,446	4,300	24.8	4,800	11.6

Source: Lloyds Bank, Egypt: Economic Report, 1985.

Table 3 presents the contributions of 28 ISIC 3-digit subsectors of manufacturing to MVA during the period 1973-82. Petroleum refineries, chemicals, machinery (electrical and non-electrical) and transport equipment increased their respective contributions to MVA significantly over the

ten-year period. The share of food products declined from 21.1 per cent in 1973 to 17.9 per cent in 1982. Though the shares of agriculturally-based industries, such as food and textile manufacturing, declined in total MVA, these industries continue to form a major part of manufacturing activities in Egypt.

The profile of food and associated industries is more diverse than that of the textile industry. Appendix Table A 1 presents information on physical volumes of output produced by food and associated industries during 1975-1980/81. Output volumes of sugar, cotton seed oil, cheese, pasta, soft drinks, beer and oleaginous seed cake indicate a strong upward trend. While the public sector concentrates on capital-intensive industries, such as sugar refining and vegetable oil milling, the Government's policy of encouraging the private sector in agro-industries has resulted in the demand for capital to expand activities in dairy processing, cold stores, poultry plants, etc. According to the inter-sectoral model of the current Five-Year Plan, the food industries rely on imports for over half of their inputs, compared with 12 per cent for textiles. The Plan's input-output table also shows that about half of the food output of the agricultural products constitutes a third of the total food consumption.

The contribution of the petroleum refineries to total MVA increased from 3.6 per cent in 1973 to 5.1 per cent in 1982. The domestic price of petroleum products is about one tifth of the international market price equivalent. Low petroleum prices have led to rapid increase in domestic consumption. The price of Egyptian oil dropped $5 a barrel to $14 in April 1986. Since Egypt relies on oil sales as a major source of foreign exchange, improved management of energy demand at the national level appears to be a prerequisite for diverting oil for exports.

Another industrial branch which increased its contribution to MVA was the chemical industry. Its contribution to MVA rose from 5.2 per cent in 1973 to 8 per cent in 1982. Egypt has already achieved self-sufficiency in some chemical products, such as sulphuric and hydrochloric acids, and industrial gases, such as oxygen, hydrogen, carbon dioxide, nitrous oxide and acetylene. With notable exception of fertilizers, most activities in the chemical industry are based on the processing of imported raw materials.

Table 3. Composition of manufacturing value added, 1973-1982
(at 1975 prices)

(percentages)

Description (ISIC)	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
TOTAL MANUFACTURING(300)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food products(311)	21.1	17.2	15.5	15.9	15.7	16.7	15.5	15.4	17.5	17.9
Beverages(313)	1.0	1.1	1.0	1.0	1.2	0.9	0.8	1.1	1.3	1.2
Tobacco(314)	3.3	3.8	3.8	3.9	4.0	4.3	4.6	4.8	3.9	4.7
Textiles(321)	25.3	28.2	28.0	27.5	26.5	22.2	19.8	19.1	18.4	17.6
Wearing apparel,except footwear(322)	0.7	0.6	0.7	0.8	0.7	1.0	1.3	1.3	...	...
Leather products(323)	0.6	0.5	0.5	0.5	0.4	0.4	0.6	0.6	...	...
Footwear,except rubber or plastic(324)	0.9	0.9	1.1	1.1	1.1	1.5	1.8	1.7	1.9	2.0
Wood products,except furniture(331)	1.4	1.0	0.8	0.8	0.8	0.8	0.9	0.7	0.7	0.8
Furniture,except metal(332)	0.5	0.4	0.3	0.3	0.3	0.5	0.5	0.5	...	...
Paper and products(341)	3.4	1.9	2.6	3.0	2.5	2.6	3.4	2.4	2.5	2.4
Printing and publishing(342)	2.4	1.6	2.2	1.8	2.6	2.4	2.1	1.8	...	...
Industrial chemicals(351)	1.9	2.1	2.4	2.1	1.8	2.0	2.2	2.1	2.5	2.6
Other chemicals(352)	5.2	5.8	6.2	5.9	5.5	5.6	6.1	6.7	8.8	8.0
Petroleum refineries(353)	3.6	5.2	3.8	4.2	4.2	4.5	4.4	4.4	4.9	5.1
Misc. petroleum and coal products(354)	1.6	2.2	2.4	3.5	3.5	3.9	6.2	6.5	...	...
Rubber products(355)	1.3	1.3	1.4	1.3	1.3	1.2	1.1	1.3	1.1	1.2
Plastic products(356)	1.1	0.9	0.9	...	...	...	...	...	...	...
Pottery,china,earthenware(361)	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
Glass and products(362)	1.0	1.0	1.1	1.0	1.1	0.9	0.7	0.7	0.7	0.7
Other non-metallic mineral prod.(369)	3.3	3.4	3.7	3.4	3.5	3.0	2.2	2.2	2.4	2.5
Iron and steel(371)	5.7	5.4	4.8	5.1	5.6	5.4	5.1	5.6	6.1	6.2
Non-ferrous metals(372)	2.0	1.8	1.7	1.8	1.9	1.8	1.7	1.9	2.1	2.2
Fabricated metal products(381)	4.2	4.7	4.0	3.9	3.4	3.5	3.8	3.7	4.4	4.4
Machinery,except electrical(382)	1.7	2.0	2.5	2.6	3.1	3.9	3.7	3.7	5.8	5.3
Machinery electric(383)	2.4	3.2	4.0	4.2	4.8	6.5	6.9	7.2	8.4	8.6
Transport equipment(384)	3.6	3.2	3.7	3.6	3.9	3.9	4.5	4.2	6.1	6.2
Professional & scientific equipm.(385)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other manufactured products(390)	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1

Source: Statistics and Survey Unit, UNIDO. Based on data supplied by the UN Statistical Office, with estimates by the UNIDO Secretariat.

Note: TOTAL MANUFACTURING is the sum of the available components and does not necessarily correspond to ISIC 300 total.

The share of textiles in total MVA fell from 25.3 per cent in 1973 to 17.6 per cent in 1982. In the 1950s the textile industry grew rapidly along the path of import substitution and developed export potential in yarn and fabrics. Output continued to grow rapidly during 1964-73 in response to rising domestic demand and a growing export market, particularly in Eastern Europe and the Soviet Union. A relatively stagnant performance was experienced in the period following 1973, compared with the rapid growth of the manufacturing sector as a whole. During the second half of the 1970s physical output of cotton yarn increased from 181 million tons in 1975 to 236 million tons in 1980. While the output of wool and jute stagnated, that of synthetic yarn suffered a sharp decline.

Industries engaged in the production of basic metals, non-electrical and electrical machinery have increased their shares in MVA during 1973-82. This resulted in an increase in the share of engineering industries in total MVA from 9.3 per cent in 1975 to 13 per cent in 1980/81.[1/] The most rapidly growing product groups are transport and electrical machinery. The declining and stagnating trend in the production of fabricated metal products is typical of the development process of engineering industries.

When external resources were plentiful, industrial investment expanded rapidly. The downward trend in the flow of external resources is triggered by the falling oil prices. The challenge that Egypt now faces is to carry out policy reforms to eliminate distortions in the economy and to implement measures towards rationalization and modernization to increase industrial efficiency at a time when foreign exchange constraints and lower growth prevail.

2.2 Performance and efficiency

Various distortions - such as the prevalence of multiple exchange rates, price controls and subsidies - seem to constrain the performance of the manufacturing sector, particularly the public enterprises. Low interest

---

1/ World Bank, Egypt: A Programme for the Development of Manufactured Exports, Export Potential and Prospects of the Engineering Industries, 1983.

rates and multiple exchange rates have promoted capital intensity of production.

Appendix Table A-2 presents annual average growth of output, inputs, and total factor productivity change[1/] in fifteen public sector industrial branches comprising 110 firms. The Table also provides information on annual average changes in capital-labour ratio, output-capital ratio, output-labour ratio and output-material ratio.

The contribution of total factor productivity change to output growth was ranging from 55 per cent in edible goods and fertilizer to 11 per cent in iron and steel manufacturing during 1973-79. However, total factor productivity change served as a negative source of growth in three industrial branches, e.g., cotton products (-4.2 per cent), rubber and plastics (-12.2 per cent) and china and glass (-4.5 per cent). Contribution to growth by capital input, labour input and material input, as indicated by figures pertaining to capital productivity, labour productivity and material productivity, reveal that output grew far more rapidly than the effective contribution of factor inputs, particularly labour and capital.

Although the results presented in Table A-2 indicate that many public sector industries experienced very rapid rates of total factor productivity growth during 1973-79, much of the increased output was largely due to increased utilization of existing capacity in response to rising aggregate demand and removal of supply constraints. The liberalization efforts coupled

---

1/ Total factor productivity change measures the change over time in output per unit of total factor inputs (combined). Previous studies of total factor productivity change in Egypt suggest that average rates of productivity growth in the industrial sector were positive and comparable to those encountered in other countries at similar levels of development between 1945 and 1962. Between 1962 and 1973, however, Egypt appears to have experienced largely negative average rates of measured total factor productivity change. The productivity performance began to deteriorate around 1962-64. These indications of declining industrial performance necessitated the announcement of major policy reforms in 1974. For further details, see World Bank, Arab Republic of Egypt: Issues of Trade Strategy and Investment Planning, Report No. 4136-EGT, January 14, 1983.

with the huge inflow of exogenous resources removed many supply constraints and increased the rate of capacity utilization. Much of the capacity in terms of technology, plants and equipment, and labour force was in place prior to 1973. However, some firms appear to have been altering the existing structure of production and adjusting to changes in the production environment as well as innovating or adopting new technologies from abroad. Research findings by the World Bank show that edible oils, transport equipment and electrical machinery experienced accelerating rates of total factor productivity change partly as a result of technological progress.

Appendix Table A-3 compares selected industrial performance indicators of public sector with those of the private sector during 1976-1981/82. The Table suggests that the productivity of labour in the private sector is far greater than in the public sector. It also reveals that the cost per job created is substantially lower in the private sector, and imports per unit of employment are about one-third. The foreign exchange costs per E £1.0 of GDP appear lower in the private sector. A relatively more efficient managerial approach and a competitive outlook seem to be the reasons for a much better performance of the private sector. The public sector, however, which is involved in most heavy industrial production, faces a greater degree of complexity in technology and management than the private sector. In addition, it has been plagued by slow and infrequent adjustments in output and prices.

Egypt's endeavour to generate an annual growth rate of around 10 per cent in the industrial sector is facing increasing difficulties. The current pace of economic growth could culminate in medium- or long-term decline. Substantial policy reforms are called for to maintain strong investment growth and to improve the efficiency of investment. The Government is trying to revitalize domestic industry for the more effective use of production capacity. A major overhaul of the textile industry, which now accounts for one-third of the manufacturing output, has been initiated. In the face of falling exogenous resources, efforts are to be directed towards raising the efficiency of industrial investments to reduce the dependence on exogenous sources of growth and to increase the capacity of the industrial sector to earn adequate foreign exchange.

Simulation results were published in April 1985 on a detailed macroeconomic framework of the impact of major distortions affecting industrial efficiency in the Egyptian public sector.[1/] Egypt's long-term growth prospects depend crucially on reforms of the numerous interventions. Adjustment of public sector prices would need to be combined with a policy environment that allows mobility of factors of production so as to raise the productivity of resources and improve overall growth prospects.

In November 1985 the Government explicitly announced its policy in pursuit of curbing losses suffered by industrial enterprises.[2/] The measures currently under way to strengthen the public sector and to develop its managerial and working system are: first, to avoid decisions that would restrict the management of projects; second, to grant the administration the freedom to utilize available resources and to rationalize its incentive system; third, to hand over those projects accruing losses to more efficient leaderships which are able to make decisions and bear responsibility for them. The new policy also calls for careful examination of complaints lodged by private entrepreneurs about administrative obstacles.

2.3 Exports and imports of manufactures

Manufactured exports have performed poorly since 1973. The share of manufactured goods (narrow definition of trade in manufactures, i.e., SITC 5-8 less 68) in total exports declined from 25.4 per cent in 1973 to 8.1 per cent in 1982 (see Appendix Table A-4). Manufactured exports fell by 3.5 per cent in 1982. The revival of exports in 1983 was largely the result of increases in the exports of cotton yarn and fabrics. In 1985 Egyptian industry in both the public and private sectors imported roughly $1.2 billion worth of raw materials and inputs, while industrial exports valued only about $600 million. Raw materials and inputs constituted one-third of imports. Capital goods, spare parts and consumer goods accounted for the remainder.

1/ World Bank, Macroeconomic Effects of Efficiency Pricing in the Public Sector in Egypt, Staff Working Paper No. 726, April 1985.

2/ See President's speech to a joint session of the People's Assembly and the Consultative Council, 13 November 1985.

Table 4 presents the list of growing and declining export products during 1975-81. Yarn export growth reflects a significant degree of excessive cotton price subsidy to spinners. Exports of basic metals - mainly aluminium ignots - have grown significantly. Egypt was hoping to export 116,000 tons of aluminium in 1985. This development may have been induced by the large subsidies on energy input. The declining products - clothing, essential oils and perfumes and furniture - are all labour-intensive products where Egypt has comparative advantage. Exports are not likely to rise rapidly as local consumption absorbs a large part of increased output.

The decline in Egyptian exports of manufactures since the mid-1970s has been accompanied by major structural changes. The most noteworthy is in the destination of exports. Although hard currency exports to Western Europe increased substantially, it failed to offset the sharp decline in exports to bilateral or clearing account currency areas, notably the centrally planned economies, whose share declined from nearly 80 per cent of the total in 1975 to about 36 per cent in 1980.

Table 4. Product structure of manufactured exports, 1975-1981
(in million EE)

	1975	(Per cent of total)	1981	(Per cent of total)
Growing Export Products				
Yarn and fabric	89.097	(47.8)	148.095	(51.0)
Basic metals	10.737	(5.8)	96.144	(33.1)
Medical and pharmaceuticals	1.550	(0.8)	3.427	(1.2)
Metal manufactures	1.372	(0.7)	3.609	(1.2)
Declining Export Products				
Clothing	26.979	(14.5)	15.595	(5.4)
Essential oils and Perfumes	21.161	(11.3)	7.757	(2.7)
Furniture	14.151	(7.6)	1.692	(0.6)
Transport equipment	4.045	(2.2)	1.822	(0.6)
	2.738	(1.5)	1.121	(0.4)

Source: Egyptian Five Year Plan, 1975/76-1981/82.

The second major change is in the product structure of exports. Instead of becoming more diversified, the structure has become more concentrated. Two product groups - yarn and fabric and basic metals - accounted for nearly 85 per cent of exports in 1981. The share of basic metals in manufactured exports increased significantly from 5.8 per cent in 1975 to 33.1 per cent in 1981. Yarn and fabrics, produced by an industry, almost entirely within the public sector, has been a traditional export item from Egypt for decades.

The share of processed goods for final use in total exports declined markedly from 27 per cent in 1975 to 16.5 per cent in 1982 (see Appendix Table A-7) . Indeed the relatively low share of finished goods, excepting petroleum products, often faced decelerated growth rates. The export share of non-processed goods for further processing increased significantly from 43.6 per cent in 1975 to 71 per cent in 1982, while exports of processed goods for further processing registered a 10.6 per cent growth during 1975-80. A comparison of these figures with data pertaining to the rapidly growing imports of processed goods for final use reveals Egypt's scope for possible further substitution of finished products as well as "export substitution" of non-processed and semi-processed goods. The growth in the production of these products depends crucially upon easing supply constraints. During 1975-80 declining imports of non-processed and semi-processed goods for further processing coincided with negative growth rates of exports of processed goods for final use. When the former recorded two-digit growth rates during 1980-82, the latter grew by 98.7 per cent. Assuming that imports of non-processed and semi-processed goods constitute raw materials and intermediate goods, it is evident that easing of supply constraints would be essential for boosting the exports of processed goods for final use. The Government has decided to rationalize its import policies, with greater attention focused on financial and technical assistance to exporters. An increase in the imports of intermediate goods and other inputs could be made possible through import rationalization. Achieving a surplus for export obviously depends upon domestic demand management.

The competitiveness of a product and the efficiency of industrial activity in the production of that product can be analysed in terms of the domestic resource cost (DRC) ratio which compares the opportunity cost of

domestically supplied factors of production to the value added at world prices in that activity. Industrial products with DRC ratio less than one are termed efficient. It means that the value of output at world prices is greater than the economic value of the inputs used to produce them.

The DRC results[1/] indicate that at present only a limited number of product groups can claim to be efficient activities with unambiguous comparative advantage. These include high cotton yarn, cotton knit products, some food products, finished leather and leather products and some engineering goods. There are additional products in the same industries as well as other products - nitrogenous fertilizer and paper products - which are close to being efficient at world prices and could become competitive with some upgrading.

A large segment of the intermediate and capital goods industries lacks competitiveness at present. These include ceramic and glass products, iron and steel, aluminium, transport equipment (buses, cars, trucks, bicycles), basic chemicals, synthetic fibres, phosphate fertilizers, and pulp and paper. Lack of competitiveness in many product areas arises from the uneconomical size of plants employing obsolete technology (phosphate fertilizer and vehicles), inadequate domestic raw material availability (pulp and paper), high cost of intermediate inputs (bicycles, consumer electronics and blended fabrics) and, more generally, inadequate technical and management skills. Possibly some of these industries could become efficient over time through appropriate rehabilitation and modern technology inputs.

Using domestic resource cost data, Table 5 classifies industrial activities and their relative export potential. For analytical convenience it groups the industrial products under activities which already appear competitive at international prices, activities which may become competitive and offer potential for exports, and activities with high domestic resource

---

1/ The DRC results presented here are based on a comprehensive study jointly undertaken by the Ministry of Industry and the World Bank. For detailed findings, see World Bank, Arab Republic of Egypt: Issues of Trade Strategy and Investment Planning, Report No. 4136-EGT, 1983.

Table 5. Comparative advantage of industrial products, 1981

I. Activities which already appear competitive at international prices	II. Activities which may become competitive and offer potential for exports	III. Activities with high domestic resource costs which are unlikely to allow efficient exports
Textiles - high and medium count cotton yarns - higher quality cotton cloths - knitted cotton fabrics - readymade clothing of cotton fabrics	Textiles - cotton/polyester blended yarns - cotton/polyester blended fabrics	Textiles - coarse count yarns - coarse cloth
Soaps and detergents	Tobacco	
	Cosmetics	
Food Products - flavours and essences - edible oils - fodder and concentrated animal feed - soft drinks - milk products - sugar - fruit jams, preserves, juices	Food Products - preserved fruits and vegetables - biscuits and confectionery - salt	Food Products - syrups - starch
Leather and Tanning	Paper Products - packaging materials - printed matter	Chemical Products - pulp and paper - phosphate fertilizer - basic industrial chemicals - artificial fibres - non-edible oils
	Nitrogenous Fertilizer (using natural gas)	
Metal Products - railway carriages - industrial electrical apparatus - non-electric consumer durables	Metal Products - shaped and formed metal - wire and cable - aluminium products - motor vehicle parts	Metal Products - road motor vehicles - basic iron and steel - metal castings - aluminium - steel pipes
Non-metallic Minerals - cement		Consumer Electronics
Wood Products - furniture		Ceramics, China and Glass

Source: World Bank, Egypt: A Programme for the Development of Manufactured Exports, December 15, 1983.

costs which are unlikely to allow efficient exports. Activities which already appear competitive at international prices encompass the production of over 17 manufactured goods. This list is based on data for the 1970s.

In 1982 UNIDO attempted to calculate Egypt's revealed comparative advantage in the subsectors of manufacturing using the broad definition (SITC 0-8). Estimated values exceeding unity indicate that the performance of the country in specific product areas is superior to that predicted by its share in world manufactures. Appendix Table A-9 summarizes the results. It can be seen that over the period 1976-77 the value of export performance ratio[1/] was greater than one for 20 industrial products. Although this list encompasses several items that appear to be already competitive (see Table 5), it lends credence to the fact that exports have declined in products where Egypt had comparative advantage For example, the declining products, such as perfumery and clothing, showed relatively high values of export performance ratio.

Appendix Table A-10 shows the proportion of exports to apparent consumption of selected manufactures over the period 1981-83. The Table identifies aluminium unwrought (91.8 per cent), motor gasoline (47.7 per cent), glycerine (38.9 per cent), iron and steel plates (22.2 per cent), pure and mixed cotton yarn (16.1 per cent), phosphatic fertilizers (14.6 per cent), and residual fuel oils (10.1 per cent) as products showing above 10 per cent share of exports in apparent consumption. These are products of textile, basic metal, chemical and oil refining industries. Since the list is confined to selected products, the Table does provide detailed information on a few products of food industry which attempt to penetrate the external market, e.g., edible oils, soft drinks, fruit jams, etc.

1/ By using the ratio:

$$Eij = \frac{Xij}{Xwj} \Big/ \frac{Xim}{Xwm}$$

Where Xij = country i's export of commodity J;
Xim = country i's export of all manufactured products;
Xwj = world export of commodity J;
Xwm = world manufacturing exports.

Source: UNIDO, Changing Patterns of Trade in World Industry, UN, New York, 1982, Sales No. E82.II.B.1, pp. 24, 25.

Table 6 presents the forecast of industrial exports during the current Five-Year Plan (1982/83-1986/87) According to the figures projected for the year 1986/87, industrial exports will account for only 9.9 per cent of total exports by that year.

The Government has adopted a three-point programme of export promotion since April 1983. Exporters are allowed to convert their foreign exchange at the most favourable exchange rate, i.e., the free market rate. There has also been a considerable amount of institutional strengthening through the establishment of a High-Level Ministerial Committee to streamline and simplify export controls and to oversee export promotion, as well as strengthening of the Export Promotion Council. The third element which has been initiated is the establishment of the Export Development Bank of Egypt in February 1985. The depressed oil market makes Egypt's limited export base more vulnerable to fluctuations in world demand. Growth of cotton exports is inhibited by restrictions imposed by the Multi-Fibre Arrangement to which Egypt is a signatory. Egypt is seeking an increase of 10 00 tonnes of cotton exports during 1986. The mandate of the Export Development Bank is to help,

Table 6. Industrial export forecast during Five-Year Plan, 1982/83 - 1986/87

(values in constant 1981/82 prices - E£ million)

Product	81/82	82/83	83/84	84/85	85/86	86/87
Cotton yarn	121	146	146	146	131	131
Cotton textiles (fabrics)	32	40	40	66	66	80
Garments	15	17	20	23	26	28
Other textiles	28	30	35	35	49	40
Cosmetics	8	10	10	11	12	15
Phosphate fertilizers	...	2	4	25	27	35
Alumunium	109	115	117	127	127	120
Cement	...	...	...	...	...	...
Canned fruit and vegetables	12	13	13	14	15	15
Dehydrated onions	6	6	6	6	6	6
Total industrial exports	331	379	391	453	459	470
Total exports	2820	3300	3513	3970	4268	4720

Source: Egyptian Five-Year Plan, 1982/83-1986/87.

encourage, develop and to diversify exports. It is an important sign of the Government's commitment drive.

For many years Egypt has traded with Eastern European countries on a barter basis. The country is planning to extend counter trade with other countries. Ready-made clothes, cotton, mixed fabrics, rugs, carpets, plastic products, shoes, leather goods, fragrances and perfumes are the main manufactured goods that can be bartered.

Increasing demand for manufactured goods from a rapidly growing population coupled with a rise in per capita income generated an upward pressure on imports. The share of manufactured imports (SITC 5-8 less 68) in total imports increased from 56.7 per cent in 1973 to 60.0 per cent in 1982.

The developed market economies were the major suppliers of manufactured goods in 1982, accounting for 94.1 per cent of total imports. The EEC countries are the major suppliers of manufactured products with the exception of processed animal and vegetable fats. The high share of capital and intermediate goods in manufactured imports appears to be a necessary condition for a fast industrial growth rate. Imports of consumer goods seem to have soared in 1984. A high marginal propensity to import consumer goods partly results from Egyptians returning from abroad, whose desires are generally backed by purchasing power.

In May 1985 the Government introduced a new strategy which classified imports into four categories: banned goods - those superfluous to the economy's needs; unnecessary goods - subject to tariffs between 250 per cent and 400 per cent; imports for which local substitutes are available - subject to tariffs between 100 per cent and 125 per cent; and essential imports for local manufacturing industries - subject to tariffs between 10 per cent and 25 per cent.

2.4 Ownership and investment patterns

As a consequence of the nationalization in the early 1960s, the manufacturing sector is dominated by about 200 mostly large public companies which currently account for 55 per cent of total employment and 68 per cent of

total value added in industry. The private sector consists of about 250,000 artisanal establishments, each employing less than ten workers and some 7,000 establishments, each employing 10 or more workers. Ninety per cent of this group employs less than 50 workers each.

Egypt's public industrial sector comprises a wide range of industrial units producing iron and steel, aluminium, fertilizer, cotton yarn, engineering and cement. Activities that can be carried out by small-scale firms - garments, food products, leather products, cosmetics, wooden furniture and fabricated metal products are the important areas of private activity.

Industry has been a privileged sector of the Egyptian economy; its share of total investment has generally exceeded its share of GDP. Between 1967-1975 most investment was channelled to the establishmet of a few new plants, while modernization and renewal received little attention. However, since 1977 the urgent need for modernizing public sector plants has been recognized. Between 1977-81, industrial investment (manufacturing and mining) increased from E £561 million to E £1215 million, absorbing about 29 per cent of total investment during the period. Most public investment has been directed at rehabilitation and expansion of existing plants rather than establishment of new plants. Nevertheless, many sectors, e.g., fertilizers, cement, textiles, etc., need urgent restructuring to introduce new technologies and new products, improve energy utilization and to reduce production costs.

Private sector investment in industry, which was at negligible levels in 1974, substantially increased following the liberalization of the economy. In 1981, its share of total industrial investment was estimated at 30 per cent. Private industrial projects established under Investment Law No. 43 of 1974 represent a sharp departure from existing private firms of the pre-liberalization period when private firms were engaged in small-scale industrial activities. Law 43 firms (see Appendix C) are mostly medium-scale establishments employing between 50-200 workers and have modern equipment and technology, often with inputs provided by foreign firms. Almost all of the industrial firms operating under Law 43 are import-substituting projects selling in the protected domestic market. Textiles, food, chemicals, metals and engineering industries represent the main areas of Investment Law 43.

Although investment has been stagnant for the last few years, the long-term record of industrial investment under Law 43, since the inception of open-door policy, has been impressive. Of the "inland" projects 41 per cent were industrial projects.

The Industrial Development Plan (1982/83-1986/87) allots E £8.6 billion or nearly 25 per cent of total investment to the industrial sector, which, however, represents a rather considerable reduction from its share in the previous Plan (29 per cent). The private sector's share of total industrial investment in the Plan is estimated at E £1.8 billion or 21 per cent, a substantial increase over the past.

During the period July-Sept. 1985 the Board of Directors of the Investment and Free Zones Authority approved 25 new projects with a total estimated capital of E £73.6 million and an estimated investment cost of E £162.2 million. Projects approved include: textile and ready-made garments, food processing, chemicals, building materials, pharmaceuticals and fodder production.

Appendix F presents industry-wise promising areas of investment opportunities in Egypt. Despite stagnating economic growth, rising deficits and other obstacles, Egypt remains a country for potential investors. The country's geographical location provides access to expanding markets. Its population growth does represent increasing domestic demand. A growing work force and educated and trained skilled workers are other positive factors.

2.5 Size and geographical distribution of manufacturing enterprises

Between 1970-1978 (latest years for which data are available) total employment in manufacturing enterprises which employed more than 10 workers each had increased from 604.5 to 760.2 thousand but the number of establishments decreased from 5,156 to 4,888. The average size of an establishment as measured by the number of employees per unit increased from 120 to 156. The average size was highest in some chemical industries (3,750 workers). Industrial enterprises employing an average of more than 1,000 workers include petroleum refineries (1,783), non-ferrous metals (1,333), pharmaceuticals (1,217) and transport equipment (1,100). The second group

Table 7. Projects approved under Law 43, as of 30 June 1985

(value in Ex. million)

Sectors	Approved Projects					Projects in Operation					Projects under Implementation				
	No.	Capital			Total Invest. Costs	No.	Capital			Total Invest. Costs	No.	Capital			Total Invest. Costs
		Local	Foreign	Total			Local	Foreign	Total			Local	Foreign	Total	
A- Inland:															
1- Industrial projects	567	928.5	1,146.7	2,075.2	5,569.2	282	335.9	383.9	719.8	1,944.5	150	297.5	313.2	610.7	1,490.2
2- Financial projects	254	855.2	925.2	1,780.4	1,909.9	223	693.8	868.0	1,561.8	1,691.3	8	26.1	10.6	36.7	36.7
3- Agricultural projects	102	158.0	159.0	317.0	685.9	37	83.1	58.0	141.1	315.7	28	40.3	44.6	84.9	196.9
4- Construction projects	204	345.8	221.4	567.2	1,263.7	101	98.1	73.5	171.6	410.8	45	54.9	72.8	127.7	337.5
5- Services projects	215	350.6	697.0	1,047.6	2,149.2	137	147.5	243.4	390.9	833.9	49	142.1	219.5	361.6	906.2
Total	1,342	2,638.1	3,149.3	5,787.4	11,577.9	780	1,358.4	1,626.8	2,985.2	5,196.2	280	560.9	660.7	1,221.6	2,967.5
B- Free Zones:															
1- Cairo	55	2.3	305.5	307.8	344.5	43	2.0	150.5	152.5	176.8	6	-	18.5	18.5	19.4
2- Alexandria	128	0.4	340.0	340.4	534.3	102	0.4	286.4	286.8	459.2	19	-	20.7	20.7	34.8
3- Suez	42	0.5	83.5	84.0	143.3	29	0.4	41.2	41.6	93.0	7	-	12.3	12.3	15.8
4- Port-Said	82	1.9	81.8	83.7	95.0	80	2.0	79.8	81.8	45.0	2	-	2.0	2.0	2.0
Total	307	5.1	810.8	815.9	1,117.1	254	4.8	557.9	562.7	774.0	34	-	53.5	53.5	72.0
Grand total	1,649	2,643.2	3,960.1	6,603.3	12,695.0	1,034	1,363.1	2,184.7	3,547.8	5,970.2	314	560.9	714.2	1,275.1	3,039.5

Source: Investment Review, A Quarterly Journal of Investment Conditions in Egypt, October 1985, Vol. 6, No. 3.

comprises industrial units with an average number of employees between 500 to less than 1,000: iron and steel (879), paper and pulp (637), and coal and petroleum products (520). The third group, with an average number of employees more than 200 but less than 500, includes tobacco (488), weaving and spinning (466), electric machinery (373), china and earthenware (338), rubber products (272), other chemicals (266), beverages (254), glass and products (234), and paper and products (228). The fourth group includes industrial enterprises with an average number of between 100 and 200 employees: unclassified machinery (181), plastic products (180) and publishing and printing (166). The last group comprises enterprises with an average of less than 100 employees: metallic products (89), professional equipment (76), non-metallic products (64) and food products (54).

About 75 per cent of private firms are located in Cairo and Alexandria, while the geographical distribution of the public sector manufacturing enterprises is somewhat even. Besides the large public industrial complexes at Cairo and Alexandria, main textile enterprises are located in Kafr El Douwar Elkobra, Mansoura and Damietta. The sugar industry is mainly located at upper Egypt. The largest fertilizer company (Kima) is located at Aswan, while the largest aluminium complex is at Nagie Hamdi. Some electric industries are located at Benha, the capital of Kalubia. A modern cement complex is located at Suez. Petroleum refineries are distributed between Suez, Alexandria and upper Egypt. The main food industrial complexes, Kaha and Edfina, are located in lower Egypt. Some pharmaceutical industries have been established in Minia in upper Egypt. The present policy of the Government encourages regional dispersal of industrial activities, with emphasis placed on industries which satisfy the basic needs such as food and building material industries.

3. INDUSTRIAL DEVELOPMENT STRATEGIES, POLICIES, PLANS AND INSTITUTIONS

3.1 Industrialization strategy

The evolution of Egypt's manufacturing sector passed through three distinct phases of development: (1) the industrialization drive in a free enterprise setting (1952-1960); (2) nationalization and creation of a dominant public sector (1961-1973); and (3) liberalization efforts and transition to a mixed economy (1974 to the present).

Typical import substitution emerged both under the regime of private enterprises (between 1930 and the late 1950s) and under that of the planned economy of the late 1960s and early 1970s. Since the adoption of the open-door policy in 1974 the Government's endeavour has been directed towards renewed emphasis on export expansion.

Nevertheless, the industrial sector is still enclaved in the traditional import substitution strategy even in the current Five-Year Plan (1982/83-1986/87). Though the Plan appears to recognize the growing need for exports, and estimates export levels in important industries (cement, textiles and metals), the Plan appears to view export as surplus production after having met the requirements of domestic demand.

The protectionist environment in which industrialization has occurred has produced a situation where much of Egypt's industry is not only uncompetitive in world markets, a feature borne out by weak performance of Egypt's manufactured exports, but also uncompetitive in its local market.

The main objectives envisaged in the current Five-Year Plan (1982/83-1986/87) are as follows:

a) To increase the share of the commodity sectors in the GDP through increasing the share of the manufacturing and mining sector firms from 13.6 per cent to 18.3 per cent;

b) To support the rapid expansion of the food and agricultural inputs and equipment, especially small tractors, irrigation pumps;

c) To meet the basic needs of the people by increasing production of essential consumer goods like cloth, especially ready-made garments, medicine, paper, sugar and dairy products;

d) To solve the problem of housing by increasing the production of building materials, mainly cement, bricks and reinforcing bars;

e) To create wider employment opportunities through providing 100,000 new jobs per annum;

f) To enhance the balance of payments position and encouraging private local and foreign capital to invest in export-oriented industries;

g) To improve the balance of payments position through accelerated growth of import substitution industries and encouraging private local and foreign capital to invest in export-oriented industries;

h) To develop an indigenous technology base to accelerate economic development through the effective utilization of the centres of applied research;

i) To increase the participation of the private sector in industrial investment, especially in basic needs industries;

j) To support small-scale and artisinal industries by the financial means, choice of technology and co-operative activities;

k) To meet the problem of transportation by increasing production of buses, trucks and small passenger cars;

l) To increase the domestic manufactured components in the assembly industries such as cars, TV sets, refrigerators, etc.;

m) To encourage foreign investment in industries where technical know-how is not available locally, the technology is complex, the raw material is found locally and the product is intended primarily for the export market; priority is given to energy saving industries;

n) To complete the ongoing projects which can yield returns in the period of the Plan; 60.6 per cent of investment is allocated to few new projects.

3.2 Industrial policy relating to foreign investment

Nearly two decades of extensive industrialization have laid the foundation for absorbing significant investment funds. Egypt invites the

participation of foreign investors in projects combining (a) indigenous labour, management and other resources; (b) Arab and foreign capital; and (c) foreign technology and management. Foreign investors will find a generally favourable investment climate and a wide range of specific investment opportunities. Egypt requires investment of many types to generate employment opportunities and to achieve export expansion. Foreign investment is sought in nearly all sectors. Free zone facilities have been created for investors who may wish to avail themselves of Egypt's exceptional attractions as a base for export promotion.

The General Authority for Investment and Free Zones (GAIFZ), established in 1971, controls most foreign investment activities which are governed by the provisions of Investment Law No. 43 of 1974.[1/]

In June 1982, some 700 Arab private investors, mostly from the Gulf sub-region, co-founded the Gulf Company for Investments, within a strategy to orient Arab private investments to the Egyptian economy under the Free Zones system and the open-door policy.[2/] The Company is to invest at least 50 per cent of its capital inside Egypt, with or without foreign partners; the rest of the capital may be invested outside the country. The Company has already promoted several industrial and infrastructural projects, some through joint-venture with foreign interests. Among projects already started are:

(a) The Company for palm oil production at E £97,444 million capital and E £21.5 million of investment cost.[3/]

(b) The Company Nimetz International for the production of Iced Desserts; the Gulf Investment Company took a 50 per cent equity in the former company by paying $4.0 million as contribution to its capital and $8.5 million for the investment costs.

1/ Main provisions and privileges under Investment Law No. 43 of 1974 are provided in Appendix C.

2/ "The Gulf Company for Investments in Egypt: the Achievements and the New Phase", In: Al-Iqtissad Wa-Al-Amâl Arab Monthly, No. 76, Beirut, Lebanon, November 1985, p.75 (in Arabic).

3/ The company took a 20 per cent share in the Malaysian Sime Darby, a leading company in palm oil production.

(c) The Shipyard Project "Stainless Steel" at E £2.5 million capital and E £6.0 million of investment cost.

(d) An adhesives Project at a capital of E £2.1 million and an investment cost of E £4.625 million.

The Gulf investments company also took equities in the two Egyptian companies: the National Company for Food Security and the Engineer National Company. At present, the Company is completing the constitution of its authorized capital after it has been raised from $120 million to $150 million.

In spite of the multiple incentives offered to foreign investment under the Egyptian investment rules, the US investments have been concentrated on only two sectors, namely oil and banking; hardly extending into the other sectors of the Egyptian economy. Thus, 86 per cent of total US investment in Egypt is today concentrated in the oil sector. Considering the traditional preference for oil extracting, the data suggests that the only innovation in the US investment's sectoral priorities is that of banking; no significant investment went to other sectors of the Egyptian economy.

To attract US and other foreign investments into sectors of the economy where the Government is offering attractive business opportunities, the US Chamber of Commerce recommended (a) the abolition of the State's subsidies to the main consumer commodities; (b) the rationalization of the customs regulations by simplifying presently complex customs dispositions; and (c) the abandonment of the multi-rate system applied to hard currency exchange.

The study suggests that by introducing such measures the Government could further attract foreign investments into the economy, especially from the USA, while re inforcing the role of the private interests in those investments.[1/]

According to figures published by the Egypt's Investment Authority, foreign investment as of November 1985 totalled $350 million. The Government is determined to improve the climate for investors as a means of increasing

---

1/ Arab Daily, London, June 1, 1985.

exports and employment opportunities. Recently the Government decided to give substantial push to the private investors. Now foreign investors are entitled to a ten-year tax holiday instead of five years. The Government has also decided to establish a special section in the Prime Minister's office to find quick solutions to bureaucratic obstacles faced by potential investors.

3.3 The institutional framework for industry

The institutional framework to support industrial development in Egypt consists of the following bodies, classified into seven broad categories.

I. Institutions concerned with the formulation of national industrial plans and policies and with the determination of industrial priorities as part of the overall plans and economic policies:

1. The Ministry of Planning prepares all plans and formulates policies for their implementation.

2. The Ministry of Industry formulates development and investment plans, programmes and policies for both the public and private sectors.

Before the adoption of the open-door policy all the public and private industrial enterprises were supervised by the Ministry of Industry and Mineral Wealth. It has been entrusted with formulating development and investement plans, programmes and policies for both the public and private sectors. Its affiliate the General Organization for Industrialization (GOFI) prepares industrial investment schedules to direct private investment into desired areas. Private industrial enterprises are authorized and controlled by this Organization.

Part of the civil manufacturing production has been supervised by the Ministry of Defence and national defence production in so far as products are produced in factories which belong to the ministry.

After the adoption of the open-door policy the institutional framework to support industrial development in Egypt became quite dispersed. Besides the part played by the Ministry of Planning,

the role of the Ministry of Industry as the main entity supervising the manufacturing sector has been limited. Supervising cotton ginning, flour milling, tea packing and bakery production has been transferred to the Ministry of Supply. With effect from the beginning of 1976 the wine and spirits industry was placed under the supervision of the Ministry of Agriculture, the paper industry under the supervision of the Ministry of Information, the cement industry under the supervision of the Ministry of housing and the medicine industry under the supervision of the Ministry of Health. Now 15 to 20 per cent of the civil manufacturing production is under the supervision of the Ministry of Defence.

As a consequence, only 70 per cent of the public sector manufacturing output is produced in the enterprises which are supervised by the Ministry of Industry.

With the open-door policy, an autonomous body under the name of the Public Authority for Investment and Free Zones has been established. Later the Ministry of Investment and International Relations was established to which the Public Authority for Investment and Free Zones was affiliated. In 1985 the Ministry of Investment and International Relations was terminated and its tasks have been entrusted to the Ministry of Planning, and the Public Authority for Investment and Free Zones is now its affiliate. It is entrusted with authorizing and following up of the Egyptian and joint enterprises established under the Investment Law No. 43 of 1974 concerning investment and Free Zones.

Streamlining and simplifying the institutional arrangements between different ministries and agencies responsible for the sector are very essential for the further development of the manufacturing sector. Not less important are the measures which have been recently taken by the Government with the aim of:

- giving greater financial and institutional autonomy to the public sector enterprises including a greater role in determining and financing their investments;

- according greater price flexibility to the public sector enterprises to bring financial and economic profitability more closely in line; and

- granting the public sector enterprises the authority to pay market wages for labour, thus enabling them to attract skilled labour which is at present an important constraint affecting productivity, and at the same time reduce somewhat the burden of the large unskilled labour force and the gradual termination of forced employment policy.

II. In the early 1960s various public organizations were established by the Government for the development and supervision of the public subsectors of industry. These public organizations were terminated in 1977. But in 1983 they were replaced by specialized public authorities in various subsectors. Each authority is entrusted with the task of co-ordinating and following up the production and financial plans and programmes of the enterprises comprised in the subsector.

III. Investment promotion and financing bodies or corporations which provide finance to industry in both public and private sectors in addition to the Ministry of Finance:

1. The National Investment Bank (established in 1982 and entrusted with the finance of the public sector industry on behalf of the Ministry of Finance)

2. Four public sector commercial Banks

3. Private foreign and local commercial and Investment Banks

4. Industrial Development Bank which is entrusted with the finance of the private sector industries including small industries.

IV. Institutions concerned with the training of management personnel, the on-the-job training and vocational training:

1. The Academy of Sadat for Management Sciences (ex National Institute of Management Development)

2. The Central Organ for Management. The above-mentioned institutions are supervised by the Minister of State for Management Development.

3. Productivity and Vocational Training Department (PVTD) within the Ministry of Industry. It has 40 training centres and has a capacity to train 13,000 annually. Twenty-five training centres are under construction and the total number of trainees annually is expected to be 26,000.

4. The Workers' Centre for Training under the supervision of the Ministry of Labor.

V. Institutions concerned with specific responsbilities as the determination of standards and quality control of industrial products, namely, the General Organization for Standardization.

VI. Industrial research and development institutions:

1. The Academy of Scientific Research and Technology

2. 13 Universities

3. The National Centre for Research

4. Industrial research and development Centres in the main industrial subsectors supervised by the Ministry of Industry.

VII. Private organizations concerned with the general or specific problems and interests of the private sector industries:

1. The Federation of Egyptian Industries who looks after the interest of the private sector industries. Recently it formulated and implemented a programme for supporting small and artisanal industries.

2. The General Commerce of Trade and its regional branches

3. The Egyptian-British, and Egyptian-American, etc. commerces of trade.

4. RESOURCES FOR INDUSTRIAL DEVELOPMENT

4.1 Human resources

The growth rate of labour supply (2.2 per cent) has lagged behind the population growth rate (2.5 per cent). This is partly due to the very low female participation in the labour force (9 per cent) and partly because of the large share of population below age 14 (about 40 per cent).

Between 1974 and 1981/82 the structure of employment changed quite noticeably. The relative shares of services and distribution sectors increased while the share of agricultural employment declined and the share of manufacturing and mining stagnated at around 12 per cent. Table 8 shows the structural changes in employment in the manufacturing sector.

The stagnation in agricultural employment was more than offset by the very rapid growth of employment in industry and services sectors, which enabled total employment to grow at a rate faster than that of the labour force. The large increase in service employment is partly due to an increase in private commercial activities following the impetus provided through the open-door policy, and partly due to an increase in government employment based on a policy of guaranteed employment for university graduates.

Table 8. Structure of employment, 1974-1981/82
(in thousands)

	1974		1981/82	
	Number	Per cent of total	Number	Per cent of total
Agriculture	4212	47.0	4248	37.0
Industry[a/]	1546	17.0	2218	20.0
Services	3272	36.0	4983	43.0

Source: National Bank of Egypt.

a/ Industry includes manufacturing and mining, petroleum, construction, electricity and public utilities.

The rapid increase in industry and service employment coupled with a large outflow of working population abroad, mainly to other Arab countries, has resulted in a gradual tightening of the labour market. Despite the present absence of significant aggregate excess supply of labour, employment became more acute with respect to the growing sectoral and skill imbalances in the labour market. For example, there is excess demand for construction, agriculture and skilled industrial workers, while there is an excess supply of university graduates and general industry workers. Virtually, there is significant disguised unemployment in the public sector enterprises.

Migration and the pattern of investment have tended to exacerbate the sectoral imbalance. New investments in industry have augmented the capital intensity of production. This has caused an increase in the demand for skilled labour and an excess of unskilled workers in industry. At the same time outward migration has caused a large reduction in the supply of skilled industrial and construction workers. There has also been a large out-flow of labour from agriculture, both to domestic urban sector and to other countries, causing an excess demand for agricultural workers and a sharp increase in agricultural wages. While this has tended to narrow the urban-rural wage differential, it has induced a large mechanization programme and consequently a large increase in demand for skill (industrial and semi-industrial workers) in the agricultural sector. In the face of the downward slide in oil price in early 1986, 10 to 15 per cent of Egyptians working abroad are forced to return home. This may reverse the above trend in the domestic economy.

The Government has attempted to correct some of these sectoral and skill imbalances by sponsoring special formal and informal training programmes. Such programmes have achieved limited success only in easing the skilled labour supply bottlenecks.

The current absence of large open unemployment is the consequence of very favourable developments which took place during the 1974-80 period which have kept the demand for Egyptian labour in Gulf States at high levels. There are clear indications that these have now reversed. Oil prices have fallen quite dramatically which has tended to lower the flow of resources linked to petroleum. The main impact of this has been a slow-down in the rate of growth of public investment since 1981/82. Remittance income and domestic private

investment have also decelerated, compared with the last few years. The effect of a reduction in the rate of growth of investment will show up in terms of a fall in the rate of labour absorption in the Egyptian economy.

4.2 Agricultural resources

Agriculture accounts for about 16 per cent of GDP and 40 per cent of total employment. In contrast to a strong past performance of GDP, agricultural growth averaged about 2 per cent per annum during the 1970s. Aided by favourable weather conditions and the introduction of new varieties of seeds, agricultural production grew by an average of 3 per cent per annum during the first three years of the 1980s. At the same time, demand for agricultural products grew rapidly reflecting population growth as well as improved incomes. The decline in domestic production was compensated by sizeable imports of agricultural trade balance as well as an erosion of exports. As a result, the agricultural trade balance, which showed a surplus of $300 million in 1970 recorded deficits of $800 million in 1977 and an estimated $2.7 billion deficit in 1981/1982. Self-sufficiency ratios for principal agricultural commodities have deteriorated remarkably between 1960 and 1981 as shown in Table 9.

As most of the agricultural products serve as inputs to the main industries in Egypt, e.g., textiles, food and paper, the decline of the agricultural production has affected these industries directly and indirectly due to shortages in domestic supply and heavy dependence on high cost imports. Egypt's agricultural land is highly productive and intensively cropped, with yields considerably above world average and good potential for even higher yields.

Nevertheless, the extremely limited supply of land, rapid urbanization which steadily erodes agricultural land, and the deterioration in soil conditions due to over-irrigation and inadequate draining system have resulted in a steady decline in crop production and place limits on the growth of the agricultural sector.

In developing the agricultural sector, difficult choices are encountered between encouraging increased acreage for industrial and exportable crops such

Table 9. Domestic supply of agricultural commodities as per cent of domestic consumption, 1960, 1974 and 1981

Agricultural commodities	1960	1974	1981
Basic Food Commodities			
Wheat	69.8	36.8	24.8
Maize	94.0	86.6	71.1
Sugar	114.2	96.0	53.2
Beans	100.4	92.5	69.8
Lentils	92.3	81.5	5.6
Edible oils	95.4	49.7	31.6
Exportable Field Crops			
Cotton	400.0	211.0	149.6
Rice	143.9	111.2	101.7
Onions (fresh only)	148.2	116.6	107.6
Ground nuts	121.6	138.9	138.6
Fruits and Vegetables			
Citrus	106.8	120.3	114.0
Potatoes	135.1	118.2	113.6
Totmatoes	100.4	100.1	100.1
Livestock Products			
Red meat	94.5	99.7	73.3
Poultry	100.0	99.2	62.8
Fish	94.5	92.4	53.6
Milk	94.2	92.5	62.2

Source: Ministry of Agriculture, The strategy of Agricultural Development in the 1980s. September 1982.

as cotton, rice, sugar cane, fruits and vegetables, in order to raise export earnings and food grains for achieving self-sufficiency in food and reducing food imports.

Table 10. Agricultural, fishery and forestry production, 1961-1984 (selected years)

Description	Unit	1961	1965	1970	1975	1982	1983	1984
PRODUCTION								
Agricultural production	('000 MT)							
Total cereals		5,009	6,138	7,478	8,130	8,522	8,700	8,725
Root crops		505	560	665	858	1,400	1,360	1,420
Total pulses		237	479	364	336	328	364	355
Oil crops		131	196	177	145	185	186	175
Total meat		296	321	370	397	490	507	552
Milk total		1,166	1,161	1,598	1,788	1,929	1,980	2,005
Livestock (number)	('000)							
Cattle		1,523	1,608	2,115	2,102	1,826	1,828	1,825
Sheep		1,552	1,855	2,066	1,926	1,394	1,420	1,450
Goats		772	787	1,155	1,321	1,498	1,499	1,500
Pigs		14	11	15	15	15	15	15
Fishery production	('000 MT)							
Freshwater & diadrom		55	63	54	75	110	112	...
Marine fish		29	32	25	29	24	25	...
Shellfish		8	7	2	2	3	4	...
Aquatic plants								
Forestry production								
Fuelwood & charcoal	('000 CM)	80	90	1,342	1,509	1,801	1,845	...
Industrial roundwood	('000 CM)	55	60	65	75	89	90	...
Sawnwood & panels	('000 CM)	5	34	34	40	33	33	...
Paper	('000 MT)	50	106	120	106	110	110	...
MAJOR COMMODITIES								
(AG + FI + FO production)								
Cotton lint	('000 MT)	336	521	509	382	460	421	390
Maize	('000 MT)	1,617	2,141	2,397	2,781	3,347	3,510	3,600
Tomatoes	('000 MT)	869	1,242	1,555	2,107	2,657	2,500	2,600
Buffalo meat	('000 MT)	83	92	93	106	127	121	134
Rice, paddy	('000 MT)	1,142	1,789	2,604	2,423	2,441	2,440	2,540
Buffalo milk	('000 MT)	761	744	1,005	1,136	1,250	1,300	1,320
Wheat	('000 MT)	1,436	1,272	1,519	2,033	2,017	1,996	1,815
Cattle meat	('000 MT)	76	85	117	124	116	116	130
Chicken meat		46	46	53	63	90	117	134
Freshwater diadrom	('000 MT)	55	63	54	75	110	112	

Source: FAO, Country Tables, Basic Data on the Agricultural Sector, 1985.

The current Five-Year Plan aims at achieving an annual average growth rate of 3.7 per cent in agricultural value added. This is substantially higher than the growth of crops with high economic returns including the main export crops, cotton and rice, and the more efficient import substitutes such as beans, sugar cane, wheat and dairy products.

4.3 Energy resources

Although Egypt is a significant energy producer at present, energy resources are limited. The main sources of commercial energy are petroleum, natural gas and hydro-power; only small deposits of coal and nuclear fuels are known to exist. In 1970, about two-thirds of electricity generation was based on hydro and one-third from fuel oil. By 1980, the proportion of hydro had fallen to just over half, fuel oil had risen slightly to 36 per cent, and natural gas contributed 11 per cent of generation. With the completion of Aswan Hydro Power Scheme, 80 per cent of Egypt's hydro electricity potential has been exploited.

Proven oil reserves have increased in recent years but so have their exploitation (see Table 11). As part of the plan to boost oil production and maintain a surplus for export, as many as 13 new exploration agreements were signed in 1984. Four leading companies are to spend $201.7 million on exploitation.[1/] At the current rate of production, proven reserves are estimated to last less than 12 years. The new discovery in Western Desert during 1985 provides a potential basin. Gas resources are more abundant and current rates of use do not threaten to rapidly deplete reserves. The Government is also embarking on an ambitious nuclear programme, but this is considered an extremely costly approach to generating new energy. Total investment in this programme is estimated at E £30 billion at 1980 constant prices.

The growth of energy demand in Egypt has been extremely rapid. Because of exceptionally low energy prices and shifts in the structure of production

---

1/ Mining Annual Review, London, 1985.

Table 11. Proven oil resources, 1978-1982

(in billion barrels)

1978	1979	1980	1981	1982	Reserves/Output Ratio
3.2	3.1	2.9	2.9	3.3	14 per cent

Source: OPAEP Le Petrole et le Gaz Arabes, "Reserves provies de petrole" Vol. XV, No. 344, 16 Juillet 1983.

towards more energy intensive sectors, the demand for petroleum products and natural gas has grown since 1974 by about 13 per cent per annum and that for electric power by about 14 per cent, much faster than the growth in total output.

The share of industry in total electric power consumption has decreased from 70 per cent in 1975 to 60 per cent in 1981. The share of the agricultural sector is insignificant, while that of commercial and residential sectors has been rising substantially. The high growth rates of energy consumption are encouraged by the very low prices of energy. Domestic energy prices are only a fraction of international prices; on average they are about 20 per cent of world market prices. Adjusting energy prices supported by a simultaneous programme of energy conservation and energy rationalization can slow the growth of demand for energy. However, many industrial technologies have been selected in Egypt in the face of very low energy prices and could be replaced with more energy-efficient production technologies.

4.4 Mineral resources

Apart from oil and gas, Egypt's mineral resources continue to be small by international standards. Only iron ore and phosphate rock are available in significant quantities. Gypsum, limestone, salt, clays, barytes, kaolin, talc, fluorspar, feldspar, quartz and silica sand are also produced. There are plans to increase gypsum production to 1.5 million tons a year by 1986/87,

particularly to meet the rising demand of the construction industry. Egypt continues to be one of the few world producers of natural sodium carbonate.

Other mineral discoveries include that on kaolin, reported in mid-1984 to have been made in the southern part of Sinai, which is stated to have raised Egypt's previously limited resources of this mineral from only 3.5 million tons to 105 million tons. Copper mining also occurs in southern Sinai and regional geochemical exploration is being continued.[1/]

4.5 Financial resources

According to the current Five-Year Plan (1982/83-1986/87), investment in the industrial sector will amount to E £8516.9 million (or 24.8 per cent of total planned investment compared with 29.2 per cent of total investment in the period 1977-1981/82) with nearly 79 per cent originating in the public sector or E £6841.9 millions and the balance E £1775.0 (21 per cent) for the private sector.

The general rule followed in allocating public investments is to provide a continuity with the existing investment programme. As a result of this policy, most public sector investments fall under:

a) replacement, innovation and rehabilitation (21 per cent); and

b) expansion of capacity in existing investments and completion of projects which are in an advanced stage of implementation (61 per cent).

Compared with the previous Plan, there is somewhat greater emphasis on commodity production and social services. Within commmodity production there is a shift in favour of agriculture, electricity and public utilities. In the past the poor performance of these sectors together with inadequate transport constituted major bottlenecks for industrial development. Industry gets a relatively lower share of total investment in the current Plan. Despite these

---

1/ Mining Annual Review, op. cit., p. 457.

relative changes in investment allocation, the main emphasis of the Plan remains on industry and transport. There is a sharp contrast in public and private sector investment allocations. The largest share of private investment is in housing (53.6 per cent) followed by industry (21.7 per cent) and agriculture (9.7 per cent). Virtually the share of industry in total public sector investments has declined from 29.2 per cent in the previous Plan (1977-1981/82) to 21.7 per cent in the current Plan. Public sector investments concentrate largely on industry (25.7 per cent), transport (20.7 per cent), electricity (10.7 per cent), public utilities (10.7 per cent) and agriculture (10.2 per cent). The currency composition of total investment indicates a foreign content of only 36 per cent. The low rate of growth of capital goods imports is based on this.

Emphasis is put on investment in industries producing (a) agricultural inputs (refined sugar, textiles, fertilizers and livestock feed); (b) construction materials, cement, reinforcing bars, glass and bricks; and (c) transport equipment, mainly trucks and passenger cars, and basic consumer goods (food, mainly refined sugar and wearing apparel-textiles).

The Plan aims at increasing domestic savings from 12 per cent of GDP in 1981/82 to 24 per cent of GDP in 1986/87. Consequently a lower proportion of investment will be financed by foreign savings and the current account deficit is to fall from around 10 per cent of GDP to less than 2 per cent of GDP. Private investment is expected to rise faster than public investment.

In order to encourage investment in industry the monetary authorities instituted a number of credit control measures which include the following:

a) Credit to the private sector for commercial purposes could grow by no more than 9 per cent.

b) Since July 1982 the maximum lending rate for industry and agriculture has been fixed at 13 per cent; for the services sector the maximum is 15 per cent and the minimum is 13 per cent, while for commercial activities the minimum rate is 16 per cent and there is no maximum lending rate. In the past, unified interest rate was imposed on credit to all activities.

c) A determinating business profit tax in favour of production sectors, mainly industry, and against commercial activities. In the past profits from commercial activities were taxed at the same rate as production activities.

4.6 Role of technical co-operation in industrial development

Egypt is one of the largest recipients of development assistance. Of the total net disbursements of Official Development Assistance from OECD countries ($2,129.4 million) to countries north of Sahara in 1983, Egypt received $1,444.3 million. Egypt appealed to the recent Tokyo summit in 1986 to establish a $30 billion Middle East development fund to assist countries in the region suffering from financial difficulties as a result of the oil price collapse.

Technical assistance provided by UNIDO totalled $1,683,516 in 1985. UNIDO is involved in a number of industrial projects in Egypt (see Appendix B). The most important of these include assistance for the development of the textile, sugar cane, plastics for agricultural purpose, electronic, cement and metallurgical industries. Assistance is also rendered in the field of management information systems, industrial consultancy services, industrial training and industrial capacity utilization. UNIDO further participated in the establishment of a multi-purpose pesticide pilot plant in addition to its participation in promotion of bentonite use in agriculture, engineering for petroleum and processing industries and in energy conservation in industry. UNIDO assistance is also sought in some pipeline projects, Fertilizer Development Centre - Food Development Centre, small-scale industries and development of capital goods.

Technical assistance is needed in crucial areas of research, development, training, management and marketing. UNDP and UNIDO have actively contributed to the establishment of 15 research and development centres affiliated to the General Corporations of textiles, food, metallurgy, engineering and chemical industries. More than $20 million from UNDP/UNIDO and E £100 million from the Government were donated towards the establishment of these centres which employ 2,000 engineers and technicians. The programme for the industrial sector in the next Country Programme Cycle (1987-91) is expected to be within $10 million from indicated planning figure sources and $5 million equivalent from government cost-sharing funds.

Priority areas and project ideas/concepts identified by the Ministry of Industry for the possible inclusion in the Country Programme, 1987-91, are: Food Development Centre, Fertilizer Development Centre, pesticides

development, capital goods, energy conservation, plastics in construction, textile fashion design, industrial advisory services for private sector, industrial consulting services, high technology application programme, feeder industry to automotive industries, better utilization of idle capacity and electronic development.

There is also need for technical assistance in marketing products especially for exports. The marketing assistance could be in the form of undertaking and supervising market research studies to promote Egyptian products in target markets and to help foreign buyers locate appropriate suppliers. This would supplement the country's export promotion efforts. In the process of rehabilitation and expansion of existing plants, priority in technical assistance could be accorded to textile, fertilizer and cement industries which need urgent restructuring to accommodate new technologies.

Appendix A

Statistical Tables

Table A-1. Products of food and associated industries, 1975 - 1980/81
('000 tons unless otherwise indicated)

Product	1975	1976	1977	1978	1979	1980	1980/81
White sugar crystal	269	296	302	344	345	360	373
Refined sugar	264	278	301	286	272	256	246
Glucose	39	43	47	37	34	40	42
Cane syrup	60	60	62	74	74	74	74
Molasses	253	293	302	274	283	297	294
Cotton seed oil	157	151	167	171	173	196	208
Hydrogenated oil	132	128	138	151	160	159	154
Oleaginous seed cake	472	356	438	430	429	517	540
White cheese	121	134	138	147	155	162	164
Processed cheese	10	13	13	15	14	15	17
Pasteurized milk	41	54	69	73	70	52	33
Dehydrated vegetables	4.9	5.3	7.3	5.2	5.3	6.6	6.2
Canned vegetables	5.6	9.6	9.7	8.0	4.6	6.3	6.8
Canned sardines	2.8	3.0	3.4	3.9	5.2	5.1	5.0
Tomato paste	2.9	3.0	2.7	5.8	3.9	5.2	4.8
Pasta	74	79	89	97	100	102	108
Soft drinks (mn bottles)	782	958	1,192	1,390	1,429	1,435	2,222
Beer (mn litres)	29	30	38	42	36	42	46
Wine (tons)	1,955	1,089	1,283	1,662	1,459	...	1,587
Alcoholic drinks ('000 litres)	680	645	640	621	636	639	633
Alcohol (mn litres)	32	30	32	30	24	26	26
Cigarettes (bn)	20.9	23.2	25.1	27.6	29.9	30.6	33.0

Source: The Economist Intelligent Unit, Egypt in the 1980s: The Challenge, Special Report No. 158, 1983.

Table X-2: Sources of growth in selected Egyptian public sector industries, 1973-1979

	FOOD			TEXTILES			CHEMICALS					METAL PRODUCTS AND ENGINEERING				
	Edible Oils	Beverage & Tobacco	Mfg. Food	Cotton a/ Products		Other Textiles	Paper	Basic Chem.	Fert.	Rubber & Plastic	Light Cons. Goods	Iron & Steel	Transp. Equip.	Fabri-cated Metals & Mach.	Elect. Mach.	China & Glass
Growth Rate of:																
Gross Output	13.6	11.7	9.2	0.5	(3.2)	3.2	9.3	14.9	23.8	12.9	-2.2	5.8	12.1	3.4	17.0	3.4
Capital Input	4.6	7.8	5.3	3.8	(3.8)	1.4	8.2	4.4	3.5	4.9	3.8	7.2	1.5	5.2	5.2	3.5
Labor Input	0.6	2.4	3.7	0.6	(0.6)	2.3	2.3	7.0	98.1	2.8	-0.2	5.7	1.6	1.0	4.2	-1.2
Material Input	7.3	5.9	7.2	-0.6	(3.9)	1.8	9.4	14.7	17.7	15.3	-3.6	3.9	10.0	4.1	16.6	3.6
Total Factor Productivity Change	7.6	6.0	3.5	-2.0	(-0.2)	1.4	2.3	3.0	13.2	-1.6	-1.3	0.7	4.5	0.5	3.8	-0.2
Contribution to Growth by: b/																
Capital Input	8.5	0.0	15.4	253.9	(57.3)	9.4	29.8	4.3	6.9	2.1	-33.9	19.6	1.0	39.4	0.8	26.9
Labor Input	0.7	0.7	13.8	44.5	(0.3)	0.0	7.6	8.7	0.0	0.0	2.2	23.3	4.6	9.8	5.2	0.0
Material Input	34.8	48.6	33.0	216.5	(46.6)	47.3	37.4	66.5	37.9	110.0	70.2	46.0	57.0	37.3	71.6	77.7
Total factor productivity change	56.0	50.6	37.8	-414.9	(-4.2)	43.2	25.2	20.5	55.3	-12.2	61.4	11.2	37.4	13.5	22.5	-4.5
Growth Rate of:																
Capital-Labor Ratio	4.3	5.4	1.6	3.2	(3.2)	-0.9	6.5	-2.6	-4.7	2.1	3.9	1.5	-0.1	4.2	1.0	4.6
Output-Capital Ratio (Capital Productivity)	8.8	4.0	3.9	-3.3	(-0.6)	1.8	0.5	10.4	20.4	8.0	-5.9	-1.4	10.6	-1.8	11.8	-0.1
Output-Labor Ratio (Labor Productivity)	13.0	9.4	5.5	-0.1	(2.6)	1.0	7.0	7.8	15.7	10.1	-2.0	0.2	10.5	2.4	12.8	4.6
Output-Material Ratio (Material Productivity)	6.3	5.9	2.0	-2.8	(-0.7)	1.4	-0.1	0.1	6.1	-2.4	1.4	1.9	2.1	-0.7	0.5	-0.2

Source: World Bank, Arab Republic of Egypt: Issues of Trade Strategy and Investment Planning, Report No. 4136-EGT, January 14, 1983.

a/ Entries in parentheses pertain to the physical input and output series.

b/ Effective growth rates of inputs divided by gross output growth rates.

Table A-3. Public and private sector industry performance ratios, 1976-1981/82 (selected years)

(E£ in constant 1975 prices)

	1976		1978		1980/81		1981/82	
	Pub.	Priv.	Pub.	Priv.	Pub.	Priv.	Pub.	Priv.
GDP per E£ 1 of investment	2.09	6.9	1.46	3.7	2.04	2.03	1.67	3.0
GDP per E£ 1 of wages & salaries	1.84	3.20	1.71	2.98	2.14	2.86	2.06	3.06
GDP per person employed	849	699	900	765	1,056	696	1,089	779
Wages & salaries per person employed	462	218	527	256	492	243	528	253
Imports per person employed	2,671	1,038	2,690	1,607	...	...	3,631	1,293
Imports per E£ 1 of GDP	3.15	1.48	2.99	2.10	...	...	3.33	1.66
Imports per E£ 1 of investment	6.75	10.20	4.36	7.83	...	...	5.57	5.00
Exports per E£ 1 of GDP	0.99	0.43	0.76	0.30	...	...	0.34	0.06
Exports per E£ 1 of Investment	2.06	2.98	1.32	1.11	...	...	0.56	0.19
Exports per person employed	837	303	682	229	...	...	368	50

Sources: World Bank, Arab Republic of Egypt: Small- and Medium-scale Industry Project, 1984, p. 34.

Note: Data are based on domestic prices and various exchange rates and are not valid for international comparisons. Imports exclude consumer goods. Both imports and exports are in US$.

Table A-4. Product mix of traded manufactured goods, 1973, 1981 and 1982 */

SITC	DESCRIPTION OF TRADE GOODS	EXPORTS 1973 PERCENT IN TOTAL MANUFACTURES	EXPORTS 1981 PERCENT IN TOTAL MANUFACTURES	EXPORTS 1982 PERCENT IN TOTAL MANUFACTURES	EXPORTS 1982 (1000 US $)	IMPORTS 1973 PERCENT IN TOTAL MANUFACTURES	IMPORTS 1981 PERCENT IN TOTAL MANUFACTURES	IMPORTS 1982 PERCENT IN TOTAL MANUFACTURES	IMPORTS 1982 (1000 US $)
01	Meat and meat preparations	.007	0.023	0.019	222	1.584	4.516	3.253	239161
02	Dairy products and eggs	0.003	0.009	0.047	554	0.506	2.998	2.278	167474
032	Fish n.e.s. and fish preparations	0 000	...	...	...	0.085	0.320	0.311	22849
0422	Rice,glazed or polished not otherwise worked	7.104	0.122	0.064	761	...	...	...	...
046	Meal and flour of wheat or of meslin	0.000	0.000	0.000	0	4.015	4.985	3.734	274555
048	Cereals preparat. & starch of fruits & vegetab.	0.057	0.016	0.005	59	0.058	0.043	0.064	4684
052	Dried fruit	0.019	0.018	0.045	529	0.003	0.100	0.071	5244
053	Fruit,preserved and fruit preparations	0.319	0.753	0.480	5664	0.004	0.101	0.066	4819
055	Vegetables,roots & tubers,preserved or prepared	0.485	0.821	0.918	10843	0.001	0.283	0.136	10027
06	Sugar,sugar preparations and honey	1.480	2.090	1.605	18949	0.000	3.544	2.018	150545
0713	Coffee extracts,essences,concentrates & similar	...	...	...	...	0.000	0.012	0.010	740
0722	Cocoa powder,unsweetened	...	...	...	...	...	0.009	0.012	849
0723	Cocoa butter and cocoa paste	...	...	...	...	0.011	0.024	0.041	3045
073	Chocolate and related food preparations	0.010	...	0.000	4	0.011	0.002	0.002	150
074	Tea and mate	...	...	0.000	5	1.438	0.816	1.193	87734
081	Feeding-stuff for animals	0.417	0.156	0.041	488	0.389	0.854	1.026	75423
09	Miscellaneous food preparations	0.067	0.062	0.026	308	0.012	0.743	0.402	29523
11	Beverages	1.450	0.460	0.576	6805	0.069	0.023	0.006	409
122	Tobacco manufactures	0.339	0.117	0.398	4697	0.055	0.165	0.490	36038
231	Crude rubber,synth. & reclaimed(excl.SITC 2311)	...	...	...	...	0.469	0.161	0.103	7544
243	Wood,shaped or simply worked	...	...	...	...	3.122	4.302	3.691	271382
251	Pulp and waste paper	...	...	...	...	1.387	0.304	0.214	15724
2626	Wool shoddy	0.001	...	...	...	...	...	...	...
2627	Wool or other animal hair,carded or combed	...	...	...	...	...	0.006	...	...
2628	Wool tops	...	0.545	0.371	4385	...	...	...	...
2629	Waste of wool and other animal hair n.e.s.	0.023	...	0.004	45	0.002	...	...	...
263	Cotton	54.616	37.347	35.528	419456	...	...	...	...
266	Synthetic and regenerated(artificial) fibres	0.003	0.048	0.093	1095	0.249	0.255	0.217	15925
267	Waste materials from textile fabrics(incl.rags)	0.203	0.064	0.084	996	0 010	0.006	0.007	512
332	Petroleum products	2.019	25.373	28.394	335234	1.506	1.811	2.842	208988
4	Animal and vegetable oils and fats	0.004	0.069	0.002	23	6.330	3.349	3.587	263737
411	Animal oils and fats	0.000	0.002	...	...	1.989	0.068	0.118	8689
421	Fixed vegetable oils,soft(incl.SITC 422)	0.001	0.001	0.000	1	4.269	1.614	1.994	146604
431	Animal and vegetable oils and fats processed	0.004	0.066	0.002	22	0.071	1.667	1.475	108444

SITC	DESCRIPTION OF TRADE GOODS	EXPORTS 1973 PERCENT IN TOTAL MANUFACTURES	EXPORTS 1981 PERCENT IN TOTAL MANUFACTURES	EXPORTS 1982 PERCENT IN TOTAL MANUFACTURES	EXPORTS 1982 (1000 US $)	IMPORTS 1973 PERCENT IN TOTAL MANUFACTURES	IMPORTS 1981 PERCENT IN TOTAL MANUFACTURES	IMPORTS 1982 PERCENT IN TOTAL MANUFACTURES	IMPORTS 1982 (1000 US $)
5	Chemicals	2.716	1.526	3.252	38400	20.777	10.967	9.658	710088
51	Chemicals elements and compounds	0.066	0.128	0.215	2543	6.714	2.257	2.031	149358
52	Tar and chemicals from coal,petroleum,nat. gas	0.005	0.022	0.013	148	0.004	0.009	0.001	44
53	Dyeing,tanning and colouring materials	0.000	0.031	0.039	456	1.514	0.877	0.819	60184
54	Medicinal and pharmaceutical products	0.179	0.383	0.706	8336	1.788	1.744	1.895	139320
55	Essential oils and perfume materials	2.207	0.867	2.151	25396	0.653	0.720	0.429	31507
56	Fertilizers,manufactured	0.152	0.014	0.044	524	3.444	1.439	0.311	22836
57	Explosives and pyrotechnic products	0.030	...	...	...	...	0.005	0.004	326
58	Plastic materials,regenerated cellul. & resins	0.072	0.050	0.064	758	1.241	1.776	2.019	148430
59	Chemical materials and products n.e.s.	0.007	0.031	0.020	239	5.419	2.139	2.150	158084
6	Manufactured goods classified by material	21.342	27.325	25.067	295948	21.831	21.321	24.751	1819788
61	Leather manufactured n.e.s. & dressed fur skins	0.103	0.005	0.022	258	0.191	0.117	0.098	7224
62	Rubber manufactures n.e.s.	0.003	0.002	0.003	37	1.553	1.241	0.974	71646
63	Wood and cork manufactures(excl.furniture)	0.033	0.017	0.022	264	0.678	0.836	0.787	57881
64	Paper,paper board and manufactures thereof	0.006	0.012	0.062	734	2.539	2.536	2.360	173499
65	Textile yarn,fabrics,made-up articles	18.457	16.006	14.082	166258	3.983	1.662	1.535	112840
66	Non-metallic mineral manufactures,n.e.s.	1.386	0.091	0.036	428	1.803	5.222	6.517	479196
67	Iron and steel	1.053	0.449	0.672	7934	8.025	5.890	7.412	544974
68	Non-ferrous metals	0.015	10.342	9.794	115636	1.268	0.637	0.630	46293
69	Manufactures of metal,n.e.s.	0.287	0.403	0.373	4399	1.791	3.179	4.437	326235
7	Machinery and transport equipment	0.754	0.079	0.035	410	33.833	34.632	36.259	2665937
71	Machinery,other than electric	0.366	0.014	0.011	132	14.021	14.147	14.792	1087592
72	Electrical machinery,apparatus and appliances	0.123	0.061	0.016	189	6.413	6.522	8.410	618321
73	Transport equipment	0.266	0.003	0.008	89	13.399	13.963	13.057	960024
8	Miscellaneous manufactured articles	6.561	2.978	2.945	34764	2.243	3.349	3.530	259563
81	Sanitary,plumbing,heating & lightning fixtures	0.067	0.019	0.023	273	0.052	0.272	0.207	15197
82	Furniture	0.767	0.204	0.220	2600	0.036	0.285	0.238	17519
83	Travel goods,handbags and similar articles	0.259	0.125	0.141	1663	0.005	0.005	0.007	545
84	Clothing	3.202	1.741	1.226	14474	0.020	0.161	0.164	12040
85	Footwear	1.617	0.189	0.197	2323	...	0.005	0.008	577
86	Professional,scient. & controll. instruments	0.009	0.002	0.001	8	0.831	1.425	1.551	114045
89	Miscellaneous manufactured articles,n.e.s.	0.640	0.699	1.137	13424	1.299	1.196	1.355	99641

	1973	1981	1982	1982	1973	1981	1982	1982
TOTAL MANUFACTURES	903347	1278264	1180644		669412	7188291	7352459	
TOTAL: SITC 5-8 LESS 68 a/	283274	275675	253887		518228	5005353	5409083	
TOTAL TRADED GOODS: SITC 0-9	1116707	3232182	3120195		914415	8839464	9077949	

Note:Data and SITC descriptions refer to SITC revision 1

*/ This table is based on the definition of trade in manufactures covering a list of 148 specifically identified SITC 3-digit or 4-digit codes comprising a wide range of processing stages of manufactured goods.

a/ Definition of trade in manufactures SITC 5-8 less 68 is one of the most often found. It covers only items recognized as exclusively manufactured goods,i.e. with a high level of manufacturing content.

Source: UNIDO data base;Information supplied by the United Nations Statistical Office.

Table A-5. Destination of manufactured exports by branch of manufacturing, 1982*/

SITC	DESCRIPTION OF TRADE GOODS	WORLD TOTAL (1000 US$)	DEVELOPING COUNTRIES (PERCENT)	DEVELOPED MARKET ECONOMIES TOTAL (PERCENT)	USA (PERCENT)	EEC (PERCENT)	JAPAN (PERCENT)	CENTRALLY PLANNED DEVELOPED COUNTRIES (PERCENT)
01	Meat and meat preparations	222	0.00	4.19	0.00	4.19	0.00	0.00
02	Dairy products and eggs	554	48.87	39.59	0.00	39.59	0.00	0.00
0422	Rice,glazed or polished not otherwise worked	761	0.00	100.00	0.00	100.00	0.00	0.00
046	Meal and flour of wheat or of meslin	0	0.00	0.00	0.00	0.00	0.00	0.00
048	Cereals preparat. & starch of fruits & vegetab.	59	80.55	0.00	0.00	0.00	0.00	0.00
052	Dried fruit	529	99.75	0.02	0.00	0.00	0.00	0.00
053	Fruit,preserved and fruit preparations	5664	93.60	6.40	5.90	0.11	0.00	0.00
055	Vegetables,roots & tubers,preserved or prepared	10843	7.05	84.29	1.79	76.20	1.23	8.66
06	Sugar,sugar preparations and honey	18949	56.11	43.88	6.70	12.45	0.00	0.00
073	Chocolate and related food preparations	4	100.00	0.00	0.00	0.00	0.00	0.00
074	Tea and mate	5	0.00	0.00	0.00	0.00	0.00	100.00
081	Feeding-stuff for animals	488	0.00	100.00	0.00	100.00	0.00	0.00
09	Miscellaneous food preparations	308	80.06	19.87	4.36	8.26	0.00	0.00
11	Beverages	6805	16.03	0.01	0.00	0.00	0.00	83.96
122	Tobacco manufactures	4697	100.00	0.00	0.00	0.00	0.00	0.00
2628	Wool tops	4385	0.00	100.00	0.00	0.00	0.00	0.00
2629	Waste of wool and other animal hair n.e.s.	45	0.00	100.00	50.10	49.90	0.00	0.00
263	Cotton	419456	14.64	59.67	0.97	25.00	15.07	25.39
266	Synthetic and regenerated(artificial) fibres	1095	51.24	48.76	0.00	24.84	0.00	0.00
267	Waste materials from textile fabrics(incl.rags)	996	0.95	99.05	4.52	19.07	0.00	0.00
332	Petroleum products	335234	0.39	55.68	0.00	51.73	0.00	0.00
4	Animal and vegetable oils and fats	23	0.00	97.18	97.18	0.00	0.00	0.00
421	Fixed vegetable oils,soft(incl.SITC 422)	1	0.00	0.00	0.00	0.00	0.00	0.00
431	Animal and vegetable oils and fats processed	22	0.00	100.00	100.00	0.00	0.00	0.00

Table A-5. (continued)

SITC	DESCRIPTION OF TRADE GOODS	WORLD TOTAL (1000 US$)	DEVELOPING COUNTRIES (PERCENT)	DEVELOPED MARKET ECONOMIES TOTAL (PERCENT)	USA (PERCENT)	EEC (PERCENT)	JAPAN (PERCENT)	CENTRALLY PLANNED DEVELOPED COUNTRIES (PERCENT)
5	Chemicals	38400	26.69	21.53	2.19	15.91	0.84	51.78
51	Chemicals elements and compounds	2543	11.85	88.15	1.90	60.30	6.55	0.00
52	Tar and chemicals from coal,petroleum,nat. gas	148	0.00	100.00	0.00	3.49	0.00	0.00
53	Dyeing,tanning and colouring materials	456	63.31	36.69	6.71	29.98	0.00	0.00
54	Medicinal and pharmaceutical products	8336	97.08	2.92	1.72	1.15	0.00	0.00
55	Essential oils and perfume materials	25396	0.68	21.03	2.22	16.83	0.62	78.30
56	Fertilizers,manufactured	524	88.42	11.58	0.00	11.58	0.00	0.00
58	Plastic materials,regenerated cellul. & resins	758	98.70	1.30	0.00	0.00	0.00	0.00
59	Chemical materials and products n.e.s.	239	77.08	22.92	22.92	0.00	0.00	0.00
6	Manufactured goods classified by material	295948	11.89	61.81	2.04	54.54	0.49	26.09
61	Leather manufactured n.e.s. & dressed fur skins	258	51.44	21.32	3.45	11.30	0.00	27.24
62	Rubber manufactures n.e.s.	37	100.00	0.00	0.00	0.00	0.00	0.00
63	Wood and cork manufactures(excl.furniture)	264	29.64	55.52	1.98	49.35	0.00	14.85
64	Paper,paper board and manufactures thereof	734	53.44	0.00	0.00	0.00	0.00	46.56
65	Textile yarn,fabrics,made-up articles	166258	9.44	44.78	3.55	34.28	0.04	45.61
66	Non-metallic mineral manufactures,n.e.s.	428	97.61	2.39	0.00	0.11	0.00	0.00
67	Iron and steel	7934	40.58	59.04	0.00	54.37	0.00	0.00
68	Non-ferrous metals	115636	11.14	88.60	0.00	85.85	0.96	0.00
69	Manufactures of metal,n.e.s.	4399	52.82	26.04	2.34	15.43	6.29	21.14
7	Machinery and transport equipment	410	93.07	6.93	0.00	6.56	0.00	0.00
71	Machinery,other than electric	132	95.87	4.13	0.00	4.13	0.00	0.00
72	Electrical machinery,apparatus and appliances	189	88.67	11.33	0.00	11.33	0.00	0.00
73	Transport equipment	89	98.29	1.71	0.00	0.00	0.00	0.00
8	Miscellaneous manufactured articles	34764	56.18	26.43	3.28	20.96	0.08	17.39
81	Sanitary,plumbing,heating & lightning fixtures	273	97.20	2.80	1.76	0.50	0.00	0.00
82	Furniture	2600	55.39	4.27	0.53	2.44	0.00	40.34
83	Travel goods,handbags and similar articles	1663	23.04	24.78	1.47	5.35	0.00	52.19
84	Clothing	14474	17.41	54.94	6.75	46.22	0.13	27.64
85	Footwear	2323	99.59	0.41	0.36	0.05	0.00	0.00
86	Professional,scient. & controll. instruments	8	100.00	0.00	0.00	0.00	0.00	0.00
89	Miscellaneous manufactured articles,n.e.s.	13424	93.88	5.17	0.84	3.29	0.07	0.95
	TOTAL manufactures	1180644	12.89	56.13	1.18	39.45	5.52	18.32
	TOTAL: SITC 5-8 LESS 68 a/	253887	20.66	38.59	3.15	29.76	0.27	40.62
	TOTAL traded goods: SITC 0-9	3120195	11.44	71.12	4.73	41.52	2.52	12.64

Note:Data and SITC descriptions refer to SITC revision 1
*/ This table is based on the definition of trade in manufactures covering a list of 148 specifically identified SITC 3-digit or 4-digit codes comprising a wide range of processing stages of manufactured goods.
a/ Definition of trade in manufactures SITC 5-8 less 68 is one of the most often found. It covers only items recognized as exclusively manufactured goods,i.e. with a high level of manufacturing content.
Source: UNIDO data base;Information supplied by the United Nations Statistical Office.
Note: Percentages may not add to 100.0 due to the fact that countries report trade to/from "unspecified areas".

Table A-6. Origin of manufactured imports by branch of manufacturing, 1982*/

SITC	DESCRIPTION OF TRADE GOODS	WORLD TOTAL (1000 US$)	DEVELOPING COUNTRIES (PERCENT)	DEVELOPED MARKET ECONOMIES TOTAL (PERCENT)	DEVELOPED MARKET ECONOMIES USA (PERCENT)	DEVELOPED MARKET ECONOMIES EEC (PERCENT)	JAPAN (PERCENT)	CENTRALLY PLANNED DEVELOPED COUNTRIES (PERCENT)
01	Meat and meat preparations	239161	71.94	27.45	10.44	15.96	0.00	0.04
02	Dairy products and eggs	167474	0.02	99.59	3.42	91.97	0.00	0.32
032	Fish n.e.s. and fish preparations	22849	1.84	91.67	0.25	1.08	78.99	0.43
046	Meal and flour of wheat or of meslin	274555	0.93	99.07	39.98	56.68	0.00	0.00
048	Cereals preparat. & starch of fruits & vegetab.	4684	0.10	98.86	0.35	83.18	0.01	0.24
052	Dried fruit	5244	84.39	14.58	0.00	10.72	0.00	0.00
053	Fruit,preserved and fruit preparations	4819	72.77	8.51	0.05	3.91	0.01	0.65
055	Vegetables,roots & tubers,preserved or prepared	10027	0.00	98.47	0.66	5.40	0.00	0.51
06	Sugar,sugar preparations and honey	150546	54.64	40.87	0.00	38.17	2.69	4.08
0713	Coffee extracts,essences,concentrates & similar	740	13.89	37.84	0.00	37.84	0.00	0.00
0722	Cocoa powder,unsweetened	849	0.00	100.00	0.00	92.33	0.00	0.00
0723	Cocoa butter and cocoa paste	3045	21.17	78.83	0.00	78.83	0.00	0.00
073	Chocolate and related food preparations	150	6.12	87.22	0.00	69.50	0.00	0.00
074	Tea and mate	87734	89.09	1.68	0.00	1.62	0.06	0.00
081	Feeding-stuff for animals	75423	0.53	84.28	12.90	53.28	0.10	0.02
09	Miscellaneous food preparations	29523	0.77	97.14	14.08	55.91	0.00	0.00
11	Beverages	409	0.00	90.20	0.00	80.18	0.00	6.50
122	Tobacco manufactures	36038	29.63	70.37	52.34	18.03	0.00	0.00
231	Crude rubber,synth. & reclaimed(excl.SITC 2311)	7544	2.16	83.47	15.34	66.07	0.00	13.61
243	Wood,shaped or simply worked	271382	2.97	73.53	1.66	1.13	0.14	21.27
251	Pulp and waste paper	15724	1.30	46.98	21.10	9.00	0.00	51.43
266	Synthetic and regenerated(artificial) fibres	15925	3.86	95.77	1.83	81.54	11.52	0.24
267	Waste materials from textile fabrics(incl.rags)	512	0.00	87.88	0.08	87.81	0.00	0.00
332	Petroleum products	208988	7.08	89.98	2.73	56.87	0.02	2.94
4	Animal and vegetable oils and fats	263737	3.30	93.46	54.86	26.21	0.00	0.00
411	Animal oils and fats	8689	0.00	100.00	94.69	5.22	0.00	0.00
421	Fixed vegetable oils,soft(incl.SITC 422)	146604	4.01	90.60	30.49	38.09	0.00	0.00
431	Animal and vegetable oils and fats processed	108444	2.60	96.80	84.62	11.84	0.00	0.00

Table A-6. (continued)*/

SITC	DESCRIPTION OF TRADE GOODS	WORLD TOTAL (1000 US$)	DEVELOPING COUNTRIES (PERCENT)	DEVELOPED MARKET ECONOMIES TOTAL (PERCENT)	USA (PERCENT)	EEC (PERCENT)	JAPAN (PERCENT)	CENTRALLY PLANNED DEVELOPED COUNTRIES (PERCENT)
5	Chemicals	710088	4.38	87.36	8.50	64.69	1.58	6.08
51	Chemicals elements and compounds	149358	6.23	80.77	6.34	59.64	1.72	9.90
52	Tar and chemicals from coal,petroleum,nat. gas	44	0.00	100.00	4.88	87.32	0.00	0.00
53	Dyeing,tanning and colouring materials	60184	13.25	77.93	10.80	56.06	0.67	8.57
54	Medicinal and pharmaceutical products	139320	0.45	99.34	6.79	81.27	0.99	0.19
55	Essential oils and perfume materials	31507	8.29	84.43	15.05	45.65	0.35	6.59
56	Fertilizers,manufactured	22836	23.15	39.70	8.38	31.25	0.00	37.16
57	Explosives and pyrotechnic products	326	0.00	91.67	29.50	55.34	0.00	0.00
58	Plastic materials,regenerated cellul. & resins	148430	1.29	88.58	6.03	71.70	1.38	6.71
59	Chemical materials and products n.e.s.	158084	2.12	92.91	12.17	60.21	2.98	1.56
6	Manufactured goods classified by material	1819788	6.51	70.57	8.63	32.95	3.15	18.19
61	Leather manufactured n.e.s. & dressed fur skins	7224	4.32	94.79	0.98	86.52	0.00	0.89
62	Rubber manufactures n.e.s.	71646	6.94	57.96	8.31	29.13	16.29	4.32
63	Wood and cork manufactures(excl.furniture)	57881	13.34	45.04	3.29	15.50	0.36	27.36
64	Paper,paper board and manufactures thereof	173499	4.30	75.34	7.45	20.54	3.30	15.21
65	Textile yarn,fabrics,made-up articles	112840	13.25	70.35	32.83	28.35	4.38	4.32
66	Non-metallic mineral manufactures,n.e.s.	479196	5.52	70.95	1.53	12.29	1.20	21.42
67	Iron and steel	544974	7.02	61.49	5.80	41.31	2.93	28.34
68	Non-ferrous metals	46293	13.49	85.73	5.76	59.09	4.38	0.30
69	Manufactures of metal,n.e.s.	326235	3.70	87.32	17.66	56.56	3.36	7.22
7	Machinery and transport equipment	2665937	5.13	77.45	11.00	46.10	10.81	6.46
71	Machinery,other than electric	1087592	2.63	86.15	16.95	51.96	8.22	6.31
72	Electrical machinery,apparatus and appliances	618321	5.56	78.36	10.61	36.33	22.85	7.90
73	Transport equipment	960024	7.68	67.01	4.51	45.74	5.98	5.70
8	Miscellaneous manufactured articles	259563	14.59	75.48	9.81	46.16	11.58	3.98
81	Sanitary,plumbing,heating & lightning fixtures	15197	4.78	77.96	7.01	57.07	0.89	10.12
82	Furniture	17519	0.63	97.31	27.02	64.06	1.96	0.81
83	Travel goods,handbags and similar articles	545	42.43	54.52	5.37	20.37	0.02	0.00
84	Clothing	12040	32.73	50.18	3.53	32.46	4.00	15.62
85	Footwear	577	28.49	49.51	0.00	49.32	0.19	0.00
86	Professional,scient. & controll. instruments	114045	12.20	80.12	11.08	45.31	15.58	3.43
89	Miscellaneous manufactured articles,n.e.s.	99641	18.84	69.27	6.60	44.10	11.38	2.88
	TOTAL manufactures	7352459	9.68	75.54	11.82	42.13	5.59	8.66
	TOTAL: SITC 5-8 LESS 68 a/	5409083	5.88	76.27	9.86	44.01	7.11	10.29
	TOTAL traded goods: SITC 0-9	9077949	10.19	77.15	19.02	36.35	4.54	7.58

Note:Data and SITC descriptions refer to SITC revision 1

*/ This table is based on the definition of trade in manufactures covering a list of 148 specifically identified SITC 3-digit or 4-digit codes comprising a wide range of processing stages of manufactured goods.

a/ Definition of trade in manufactures SITC 5-8 less 68 is one of the most often found. It covers only items recognized as exclusively manufactured goods,i.e. with a high level of manufacturing content.

Source: UNIDO data base;Information supplied by the United Nations Statistical Office.

Note: Percentages may not add to 100.0 due to the fact that countries report trade to/from "unspecified areas".

Table A-7. Shares of exports and imports classified according to level of processing, 1975 and 1982, and trend growth rates, 1975-1980 and 1980-1982

CLASSES	EXPORTS				IMPORTS			
	CLASS SHARE OF TOTAL (PERCENTAGE)		CLASS GROWTH RATE (PERCENTAGE)		CLASS SHARE OF TOTAL (PERCENTAGE)		CLASS GROWTH RATE (PERCENTAGE)	
	1975	1982	1975-1980	1980-1982	1975	1982	1975-1980	1980-1982
A : Non-processed goods for further processing	43.65	71.01	24.11	-2.71	25.03	15.83	-7.11	38.79
B : Processed goods for further processing	22.49	8.08	10.56	-27.19	24.97	16.00	-0.90	26.61
C : Non-processed goods for final use	6.80	4.43	-5.44	17.84	4.44	6.86	8.48	42.19
D : Processed goods for final use	27.06	16.48	-16.17	98.74	45.56	61.31	9.57	38.33
Sum of classes: A+B+C+D in 1000 current US$		1975 1401872		1982 3120110		1975 3933730		1982 9061900
Total trade SITC 0-9 in 1000 current US$		1401872		3120195		3933730		9077949

SOURCE: UNIDO data base; Information supplied by the United Nations Statistical Office, with estimates by the UNIDO Secretariat.

Note: Calculations are based on current us dollar prices.
Sum of classes and Total trade figures should be identical. Discrepancies or zero values are due to lack of countrys" trade reporting in general, but especially at the 3-, 4- and 5-digit SITC level.

Table A-3. [illegible]

Description of traded goods (SITC)	Imports (Percentage of total trade)		Exports (Percentage of total trade)		Trade balance (Exports less imports in 1000 current US $)	
	1981	1982	1981	1982	1981	1982
OILS AND FATS						
Animal oils and fats(411)	0.1	0.1	0.0	...	-4847.1	...
Fixed vegetable oils and fats(421/2)	1.3	1.6	0.0	0.0	-116020.9	-146603.0
Processed animal and vegetable oils and fats(431)	1.4	1.2	0.0	0.0	-119007.7	-108422.6
CHEMICALS						
Organic chemicals(512)	1.2	0.9	0.0	0.1	-100595.8	-82930.6
Inorganic chem., oxides and halogen salts(513/4)	0.7	0.7	0.0	0.0	-59989.0	-63877.4
Dyeing, tanning and colouring materials(531)	0.3	0.3	0.0	0.0	-22900.2	-22456.9
Medicinal and pharmaceutical products(541)	1.4	1.5	0.2	0.3	-120477.6	-130984.3
Plastics, cellulose and artificial resins(581)	1.4	1.6	0.0	0.0	-127040.3	-147672.1
FERTILIZERS						
Nitrogenous fertilizers & related materials(5611)	0.8	0.1	...	0.0	...	-13073.9
Phosphatic fertilizers and related materials(5612)	0.3	0.1	0.0	0.0	-25231.0	-6513.0
Potassic fertilizers and related materials(5613)	0.0	...	...	...	...	...
PETROLEUM						
Petroleum, crude or partly refined(331)	...	...	54.4	55.5	...	...
Petroleum products(332)	1.5	2.3	10.0	10.7	194120.1	126245.6
RUBBER						
Crude rubber, synthetic and reclaimed(231)	0.2	0.2	...	...	...	...
Rubber materials, e.g.sheets, threads, piping(621)	0.1	0.1	0.0	0.0	-11179.0	-13390.4
Articles of rubber, e.g. tyres, tubes(629)	0.9	0.6	0.0	0.0	-77995.5	-58218.5
WOOD AND FURNITURE						
Wood, shaped or simply worked(243)	3.5	3.0	...	...	...	...
Pulp paper, including waste(251)	0.2	0.2	...	...	...	...
Veneers, plywood, improved wood(631)	0.6	0.6	0.0	0.0	-51910.9	-51235.2
Wood manufactures(632)	0.1	0.1	0.0	0.0	-7644.2	-5888.6
Paper and paperboard(641)	1.9	1.7	0.0	0.0	-164910.1	-155693.1
Articles of pulp, paper or paperboard(642)	0.2	0.2	0.0	0.0	-17220.8	-17071.8
Furniture(821)	0.2	0.2	0.1	0.1	-17885.1	-14918.5
TEXTILES AND CLOTHING						
Wool and other animal hair(262)	0.3	0.3	0.3	0.2	-15854.4	-18277.3
Cotton(263)	...	...	14.8	13.4	...	...
Jute(264)	0.0	0.1	...	...	...	...
Vegetable fibres, flax and hemp(265)	0.0	0.0	0.2	0.1	3799.9	2331.9
Synthetic and regenerated fibres(266)	0.2	0.2	0.0	0.0	-17704.6	-14830.9
Textile yarn and thread(651)	0.5	0.7	4.9	4.0	108884.8	61940.5
Woven cotton fabrics(652)	0.0	0.0	1.0	0.7	33359.8	22536.7
Woven textile fabrics(653)	0.2	0.1	0.0	0.0	-13640.0	-8141.1
Made-up articles chiefly of textiles(656)	0.3	0.1	0.2	0.3	-21091.0	-1703.6
Travel bags, handbags, etc.(831)	0.0	0.0	0.0	0.1	1224.5	1118.2
Clothing, excluding leather(841 less 8413)	0.1	0.1	0.6	0.4	8233.1	1222.2
Calf leather(6113)	...	...	...	...	...	..
LEATHER AND PRODUCTS						
Other leather, including artificial(611 less 6113)	0.0	0.0	0.0	0.0	-2809.3	-1791.3
Leather manufactures(612)	0.1	0.1	0.0	0.0	-5541.0	-5165.7
Apparel and accessories of leather(8413)	0.0	0.0	0.1	0.0	2357.3	1212.2
Footwear(85)	0.0	0.0	0.1	0.1	2077.2	1745.6
BUILDING MATERIALS AND GLASS						
Lime, cement, fabricated building materials(661)	2.8	4.0	0.0	0.0	-244540.7	-364073.8
Construction and refractory materials of clay(662)	0.5	0.5	0.0	0.0	-46980.9	-46288.0
Glass(664)	0.3	0.3	0.0	0.0	-25424.6	-28337.8
Glassware and pottery(665/6)	0.5	0.3	0.0	0.0	-43529.5	-28720.4

======> continued

Description of traded goods (SITC)	Imports (Percentage of total trade)		Exports (Percentage of total trade)		Trade balance (Exports less imports in 1000 current US $)	
	1981	1982	1981	1982	1981	1982
IRON AND STEEL						
Iron ore and concentrates(281)	0.0	0.0	...	...	...	...
Iron and steel scrap(282)	0.0	0.0	...	...	...	...
Pig iron and sponge(671)	0.1	0.1	...	...	...	...
Ingots and other primary forms(672)	0.0	0.0	0.0	...	-3078.2	...
Bars, rods, shapes, sections(673)	2.9	3.0	...	0.0	...	-270649.5
Universals, plates and sheets(674)	0.7	0.7	0.1	0.2	-60556.7	-58000.5
Hoop and strip(675)	0.0	0.0	...	...	...	...
Iron and steel wire(677)	0.1	0.1	0.0	0.0	-6517.7	-5788.2
Tubes, pipes and fittings(678)	0.6	1.2	0.0	0.0	-52034.5	-112013.5
Unworked castings and forgings(679)	0.3	0.5	0.0	0.0	-29902.0	-46621.3
NON-FERROUS METALS						
Non-ferrous ore and concentrates(283)	0.0	0.0	...	...	...	...
Copper, blister, refined, alloys(6821)	0.1	0.0	...	...	...	...
Copper bars, shapes, sections, wire, etc.(6822)	0.2	0.2	...	...	...	...
Aluminium, unwrought or worked(684)	0.1	0.1	4.1	3.7	122058.4	108462.6
Lead, unwrought or worked(685)	0.1	0.1	...	...	...	...
Zinc, unwrought or worked(686)	0.0	0.1	...	...	...	...
Tin and alloys, unwrought or worked(687)	0.0	0.0	...	...	...	...
Wire products, e.g. cables, ropes(693)	0.1	0.1	...	0.0	...	-9115.2
SELECTED CAPITAL GOODS						
Hand tools used in agriculture(6951)	0.0	0.0	...	...	...	...
Tools for use in hand or machine(6952)	0.2	0.2	0.0	0.0	-21217.9	-21247.3
Power generating machinery, non-electric(711)	0.8	0.6	0.0	0.0	-67915.5	-58905.6
Agricultural machinery(7121/2)	0.1	0.1	0.0	0.0	-7297.9	-7594.7
Dairy equipment(7123)	0.0	0.0	...	...	...	...
Tractors(7125)	0.7	0.3	0.0	...	-64865.1	...
Office machines(714)	0.2	0.2	...	...	...	...
Metal working machinery(715)	0.3	0.3	0.0	0.0	-29114.8	-27385.0
Textile and leather machinery(717)	1.5	1.6	0.0	0.0	-130460.8	-144433.0
Machines for paper, pulp and paper articles(7181)	0.1	0.0	...	0.0	...	-4346.2
Industrial food-processing machinery(7183)	0.2	0.2	0.0	0.0	-20948.9	-20953.0
Machine tools for working minerals,wood,etc.(7195)	0.2	0.2	...	...	...	...
Electrical power machinery and switchgear(722)	1.9	1.9	0.0	0.0	-167824.3	-173407.7
MAJOR CONSUMER DURABLES						
Commercial road vehicles(732 less 7321)	7.5	6.6	0.0	0.0	-665047.4	-597773.8
Passenger motor cars(7321)	2.2	2.8	...	...	...	...
Television and radio sets(7241/2)	0.4	0.3	0.0	0.0	-37071.6	-30027.6
Domestic electrical equipment(725)	0.5	0.7	...	0.0	...	-66310.1
TOTAL OF ABOVE, IN MILLIONS OF US $	4090	4240	2947	2811	-1142	-1430
TOTAL TRADE (SITC 0 TO 9), IN MILLIONS OF US $	8839	9078	3232	3120	-5607	-5958

Source: Statistics and Survey Unit, UNIDO.Based on data supplied by the UN Statistical Office, with estimates by the UNIDO Secretariat.

Table A-9. Export performance indicators, 1969-1977 (selected years)

SITC CODE	NOTES	COMMODITY DESCRIPTION	SHARE IN TOTAL EXPORTS OF MANUFACTURES (PER CENT)		NET EXPORTS AS PERCENTAGE OF TOTAL TRADE		EXPORT-PERFORMANCE RATIO	
			1969-1970	1976-1977	1969-1970	1976-1977	1969-1970	1976-1977
011-013		MEAT AND MEAT PREPARATIONS	0.061	0.040	-91.98	-99.10	0.01	0.02
022-024		DAIRY PRODUCTS	0.011	0.002	-98.82	-99.95	0.00	0.00
046		MEAL AND FLOUR OF WHEAT OR OF MESLIN	0.001	0.000	-99.98	-100.00	0.00	0.00
048		CEREAL PREPARATIONS AND STARCH	0.221	0.161	69.21	-46.81	0.36	0.44
052		DRIED FRUIT	0.034	0.004	36.60	-97.24	0.16	0.03
053		FRUIT,PRESERVED AND FRUIT PREPARATIONS	0.596	0.796	96.50	1.29	0.74	1.61
055		VEGETABLES,ROOTS & TUBERS,PRES. OR PREP.	1.881	1.516	91.80	72.24	2.99	3.34
061,062		SUGAR,SUGAR PREPARATIONS AND HONEY	3.824	4.857	78.79	-28.12	2.37	3.47
0722/3+073	a/	COCOA AND CHOCOLATE PREPARATIONS	0.005	0.009	12.22	-56.97	0.01	0.04
081		FEEDING-STUFF FOR ANIMALS	2.418	0.552	73.54	-74.59	1.32	0.36
091		MARGARINE AND SHORTENING	0.001	0.000	-67.36	-99.99	0.00	0.00
099		FOOD PREPARATIONS,N.E.S.	0.092	0.574	47.41	32.51	0.22	1.67
112		ALCOHOLIC BEVERAGES	2.804	3.426	94.63	86.35	1.32	2.70
122		TOBACCO MANUFACTURES	0.273	0.188	54.81	-80.63	0.39	0.40
2626-2628	b/	WOOL SHODDY,OTHER ANIMAL HAIR & TOPS	0.031	0.288	-36.28	63.37	1.28	12.09
266		SYNTHETIC AND REGENERATED FIBRES	0.120	0.009	-79.21	-98.08	0.11	0.02
332		PETROLEUM PRODUCTS	1.262	17.284	-83.50	60.55	0.20	2.68
411		ANIMAL OILS AND FATS	0.001	0.000	-99.96	-99.99	0.00	0.00
421,422		FIXED VEGETABLE OILS AND FATS	0.027	0.005	-99.53	-99.61	0.02	0.01
512		ORGANIC CHEMICALS	0.304	0.148	-91.90	-97.71	0.06	0.03
513		INORGANIC CHEMICALS:ELEM.,OXIDES,HALIDES	0.042	0.002	-96.42	-99.93	0.03	0.00
514		OTHER INORGANIC CHEMICALS	0.066	0.004	-95.59	-99.81	0.07	0.01
533		PIGMENTS,PAINTS,VARNISHES AND RELATED	0.008	0.002	-99.14	-99.88	0.01	0.00
541		MEDICINAL AND PHARMACEUTICAL PRODUCTS	0.919	0.754	-72.16	-80.08	0.31	0.38
551		ESSENTIAL OILS,PERFUME & FLAVOUR MATLS.	1.315	3.346	36.50	32.77	3.24	13.26
553		PERFUMERY & COSMETICS EXCEPT SOAPS	0.967	3.765	80.23	79.25	2.38	11.39
554		SOAPS,CLEANSING & POLISHING PREPARATIONS	1.438	0.142	41.45	-74.77	2.40	0.34
561		FERTILIZERS,MANUFACTURED	0.560	0.121	-75.15	-96.61	0.42	0.13
571		EXPLOSIVES & PYROTECHNIC PRODUCTS	0.030	0.099	-1.42	80.20	0.18	0.91

Table A-9, (continued)

SITC CODE	NOTES	COMMODITY DESCRIPTION	SHARE IN TOTAL EXPORTS OF MANUFACTURES (PER CENT)		NET EXPORTS AS PERCENTAGE OF TOTAL TRADE		EXPORT-PERFORMANCE RATIO	
			1969-1970	1976-1977	1969-1970	1976-1977	1969-1970	1976-1977
599		CHEMICAL MATERIALS & PRODUCTS N.E.S.	0.095	0.074	-97.71	-98.86	0.03	0.04
611		LEATHER	0.246	0.128	59.44	-10.81	0.27	0.23
612		MANUFACTURES OF LEATHER OR RECONSTITUTES	0.218	0.246	56.02	-51.30	1.51	2.08
629		ARTICLES OF RUBBER N.E.S.	0.492	0.025	-57.47	-99.10	0.29	0.02
632		WOOD MANUFACTURES N.E.S.	0.140	0.079	-5.35	-55.84	0.28	0.18
641		PAPER AND PAPERBOARD	0.006	0.004	-99.77	-99.95	0.00	0.00
642		ARTICLES OF PULP,PAPER OR PAPERBOARD	0.040	0.039	-86.45	-94.82	0.04	0.06
651		TEXTILE YARN AND THREAD	35.723	26.729	89.09	78.46	9.40	13.03
652		COTTON FABRICS,WOVEN	16.861	8.768	99.92	78.71	9.89	7.64
653		TEXTILE FABRICS,WOVEN OTHER THAN COTTON	1.238	0.098	0.09	-92.75	0.27	0.04
654		TULLE,LACE,EMBROIDERY,RIBBONS ETC.	0.058	0.022	21.62	-77.50	0.17	0.12
655		SPECIAL TEXTILE FABRICS & REL. PRODUCTS	0.201	0.140	-87.81	-90.62	0.18	0.21
656		MADE-UP ARTICLES,CHIEFLY OF TEXTILES	2.057	1.910	-1.12	-8.68	2.72	4.06
657		FLOOR COVERING,TAPESTRIES ETC.	1.257	1.816	80.21	63.63	1.55	2.99
661		LIME,CEMENT,BUILD. MAT. EXC. GLAS & CLAY	3.159	0.316	96.32	-88.83	5.82	0.61
662		CLAY & REFRACTORY CONSTRUCTION MATERIALS	0.089	0.015	-90.58	-98.94	0.13	0.03
663		MINERAL MANUFACTURES,N.E.S.	0.008	0.013	-98.60	-97.59	0.01	0.03
664		GLASS	0.050	0.001	-73.32	-99.65	0.06	0.00
665		GLASSWARE	0.141	0.070	-80.87	-95.71	0.22	0.16
666		POTTERY	0.003	0.005	-89.12	-94.40	0.01	0.02
671		PIG IRON,SPIEGELEISEN,SPONGE IRON ETC.	0.384	0.551	-61.60	-32.96	0.49	0.97
673		IRON & STEEL BARS,RODS,ANGLES ETC.	0.275	0.019	-77.93	-99.70	0.09	0.01
674		UNIVERSALS,PLATES & SHEETS OF IRON,STEEL	1.180	0.535	-69.27	-78.33	0.20	0.16
678		TUBES,PIPES & FITTINGS OF IRON OR STEEL	0.181	0.194	-83.17	-92.98	0.07	0.08
684		ALUMINIUM	0.055	3.947	-81.49	62.11	0.02	2.68
691		FINISHED STRUCTURES & STRUCT.PARTS N.E.S	0.022	0.080	-94.90	-98.73	0.02	0.07
694		NAILS,SCREWS,NUTS,BOLTS,RIVETS ETC.	0.003	0.003	-99.01	-99.46	0.01	0.01
695		TOOLS FOR USE IN THE HAND OR IN MACHINES	0.005	0.033	-98.17	-94.71	0.00	0.04
696		CUTLERY	0.002	0.004	-92.31	-97.83	0.00	0.02
697		HOUSEHOLD EQUIPMENT OF BASE METALS	0.319	0.341	65.75	-42.79	0.57	0.90
698		MANUFACTURE OF METALS N.E.S.	0.036	0.189	-94.36	-89.44	0.02	0.13
711		POWER GENERATING MACHINERY EXC.ELECTRIC	0.005	0.046	-99.78	-98.60	0.00	0.01
715		METALWORKING MACHINERY	0.004	0.002	-99.88	-99.87	0.00	0.00
717		TEXTILE AND LEATHER MACHINERY	0.009	0.001	-99.83	-99.99	0.00	0.00
718		MACHINES FOR SPECIAL INDUSTRIES	0.015	0.092	-98.98	-99.31	0.00	0.02
719		MACHINES,APPLIANCES(EXC.ELECTR.),PARTS	0.694	0.097	-91.57	-99.51	0.05	0.01
722		ELECTRIC POWER MACHINERY,SWITCHGEAR	0.063	0.024	-97.48	-99.40	0.02	0.01
723		EQUIPMENT FOR DISTRIBUTING ELECTRICITY	0.235	0.167	-75.29	-95.80	0.23	0.22
724		TELECOMMUNICATIONS APPARATUS	0.115	0.039	-94.50	-99.41	0.02	0.01
725		DOMESTIC ELECTRICAL EQUIPMENT	0.016	0.001	-96.19	-99.92	0.01	0.00

Table A-9. (continued)

SITC CODE	NOTES	COMMODITY DESCRIPTION	SHARE IN TOTAL EXPORTS OF MANUFACTURES (PER CENT)		NET EXPORTS AS PERCENTAGE OF TOTAL TRADE		EXPORT-PERFORMANCE RATIO	
			1969-1970	1976-1977	1969-1970	1976-1977	1969-1970	1976-1977
729		OTHER ELECTRICAL MACHINERY & APPARATUS	0.108	0.011	-93.23	-99.70	0.02	0.00
732		ROAD MOTOR VEHICLES	0.582	0.760	-94.52	-97.49	0.02	0.04
735		SHIPS AND BOATS	0.001	0.005	-99.61	-98.66	0.00	0.00
812		SANITARY,PLUMBING,HEATING & LIGHT. FIXT.	0.035	0.030	-79.50	-93.19	0.04	0.05
821		FURNITURE	2.354	1.302	91.27	42.28	1.84	1.01
831		TRAVEL GOODS,HANDBAGS & SIMILAR ARTICLES	0.812	0.725	99.12	58.64	2.51	2.56
841		CLOTHING EXCEPT FUR CLOTHING	4.647	7.339	83.81	52.30	0.80	1.62
851		FOOTWEAR	4.447	1.994	99.79	94.91	2.39	1.55
861		SCIENTIFIC,MEDICAL,OPTICAL,MEASUR.INSTR.	0.034	0.003	-95.21	-99.91	0.01	0.00
862		PHOTOGRAPHIC & CINEMATOGRAPHIC SUPPLIES	0.000	0.001	-99.94	-99.80	0.00	0.00
891		MUSICAL INSTR.,SOUND RECORDERS & REPROD.	0.111	0.364	-32.82	-66.97	0.06	0.29
892		PRINTED MATTER	1.611	2.308	16.79	1.96	0.85	2.00
893		ARTICLES OF ARTIF. PLASTIC MATLS. N.E.S.	0.007	0.015	-97.81	-98.76	0.01	0.02
894		PERAMBULATORS,TOYS,GAMES,SPORTING GOODS	0.014	0.020	-79.08	-95.68	0.01	0.02
895		OFFICE & STATIONERY SUPPLIES N.E.S.	0.005	0.000	-94.17	-99.95	0.02	0.00
897		JEWELLERY,GOLD AND SILVER WARES	0.124	0.114	14.93	-4.94	0.21	0.21
899		MANUFACTURED ARTICLES,N.E.S.	0.096	0.042	-31.62	-92.79	0.07	0.06

Source: UNIDO, Changing Patterns of Trade in World Industry: An Empirical Study on Revealed Comparative Advantage, 1982.

a/ SITC 073 only.
b/ SITC 2627 only.

Table A-1c. Average apparent consumption of selected manufactures, 1981-1983

Product grouping and commodity (ISIC)			Average apparent consumption per 1000 inhabitants		Imports		Exports		Average annual production		Growth rate of apparent consumption
					As percentage of apparent consumption						
			1981	1983	1981	1983	1981	1983	1981	1983	1975-1983
FOOD PRODUCTS											
Raw sugar (311801)		W	16.96		5.2		0.0		708667		3.42
Refined sugar (311804)	a	W	22.89		41.0		2.1		609000		0.67
Cocoa powder (311907)			0.12		14.1		0.0		4380		19.72
Cocoa butter (311910)	a	W	0.02		43.4		0.0		611		1.58
Chocolate and chocolate products (311911)		W	0.11		8.4		0.0		4619		13.09
Prepared animal feeds (312201)	a	W	46.59		1.4		0.0		2000000		24.99
OILS AND FATS		W									
Oils and fats of animals, unprocessed (311502)		W									
Oils of vegetable origin (311510)	a	W	13.85		11.0		0.0		415822		4.26
TEXTILES											
Wool yarn, pure and mixed (321103)		W	0.33		0.2		0.0		14591		2.12
Cotton yarn, pure and mixed (321109)		W	4.65		0.0		16.1		237691		3.17
Cotton woven fabrics (321128)		S	18945.70		0.0		6.7		690666581		2.19
Woollen woven fabrics (321134)		S	416.56		1.2		0.0		18147331		0.92
Knitted fabrics (321301)	a	W	0.02		11.0		0.0		672		5.13
FOOTWEAR											
Footwear, excluding rubber footwear (324000)		P	1311.17		0.4		0.3		57733664		7.98
WOOD AND WOOD PRODUCTS											
Veneer sheets (331110)		V	0.14		69.2		0.0		1933		9.14
Particle board (331122)		V	1.15		38.9		0.0		31000		8.75
PAPER AND PAPER PRODUCTS											
Wood pulp, mechanical (341101)	a	W	0.01		100.0		0.0		0		38.27
Pulp of fibres other than wood (341104)			2.29		20.7		0.5		80000		5.49
Wood pulp, dissolving grades (341107)	a	W	0.10		100.0		0.0		0		1.60
Wood pulp, sulphate and soda (341110)		W	0.45		100.1		0.1		0		6.19
Wood pulp, sulphite (341113)	a	W	0.08		100.0		0.0		0		6.65
Wood pulp, semi-chemical (341116)		W									
Newsprint (341119)		W	1.91		100.0		0.0		0		6.06
Other printing and writing paper (341122)		W	2.55		57.3		0.0		48000		7.07
Kraft paper and kraft paperboard (341125)	a	W	2.33		60.6		0.0		39903		5.79
Other paper and paperboard (341131)	D	W	1.82		28.5		0.0		56000		8.33
INDUSTRIAL CHEMICALS											23.11
Methanol (methyl alcohol) (351121)		W									
Glycerine (glycerol) (351125)		W	0.11		0.7		38.9		6420		8.69
Chlorine (351145)		W	0.17		8.4		0.0		6667		5.51
Sulphuric acid (351147)		W	1.02		0.2		0.0		45000		5.04
Nitric acid (351149)		W	0.04		12.4		0.0		1667		1.58
Zinc oxide (351154)		W									
Titanium oxides (351155)	a	W	0.05		100.0		0.0		0		10.17
Lead oxides (351157)	a	W	0.11		65.8		0.0		1653		24.26
Ammonia (351158)		W	14.38		0.0		0.0		634067		27.65
Caustic soda (351159)	a	W	1.75		43.2		0.0		44000		1.71
Soda ash (351166)		W									
Hydrogen peroxide (351171)		W	0.04		100.0		0.0		0		7.34
Calcium carbide (351173)	a	W	0.12		100.0		0.0		0		36.62
Dyestuffs, synthetic (351174)		W									
Vegetable tanning extracts (351175)		W									
Nitrogenous fertilizers (351201)			14.33		11.9		4.4		584500		7.13
Phosphatic fertilizers (351204 + 351207)			3.19		28.7		14.6		128400		11.35
Potassic fertilizers (351210)			0.21		100.0		0.0		0		40.88
Insecticides, fungicides, etc. (351216)	a	W	0.76		60.9		0.1		12899		2.62
Rubber, synthetic (351301)		W	0.18		100.0		0.0		0		2.41
Non-cellulosic staple and tow (351304)		W	0.41		35.6		5.1		9397		22.66
Regenerated cellulose (351331)		W	0.06		100.0		0.0		0		27.56

(continued)

Table [illegible] (continued)

Product grouping and commodity (ISIC)		Unit	Average apparent consumption per 1000 inhabitants 1981-1983	Imports As percentage of apparent consumption 1981-1983	Exports As percentage of apparent consumption 1981-1983	Average annual production 1981-1983	Growth rate of apparent consumption 1975-1983
PETROLEUM REFINERIES							
Motor gasolene (353007A)		W	33.72	0.1	47.7	2193000	8.05
Kerosene (353013A)		W	40.76	0.0	6.9	1920133	5.97
Distillate fuel oils (353019A)		W	66.80	10.8	2.7	2705333	10.05
Residual fuel oils (353022A)		W	172.30	0.7	10.1	8301667	8.66
Lubricating oils (353025A)		W	4.10	49.6	0.0	91000	17.85
Liquefied petroleum gas (353037A)		W	10.82	43.6	0.0	269000	14.39
GLASS AND CEMENT							
Glass bottles and containers (362010B)	a	W	1.49	41.1	0.1	38333	2.48
Cement (369204)		W	204.86	58.8	0.0	3717667	14.54
IRON AND STEEL							
Pig iron (371007 + 371010)		W	8.04	9.8	0.0	319667	9.35
Wire rods (371028)	a	W	6.78	0.1	0.0	295000	3.29
Angles, shapes and sections (371035)	a	W	10.43	13.1	0.0	394500	10.91
Plates(heavy, over 4.75 mm) (371040)	a	W	1.93	52.1	22.2	59000	21.24
Plates(medium) 3 to 4.75 mm (371043)	a	W	0.43	110.1	10.1	0	33.40
Plates and sheets < 3 mm (371046 + 371049 + 371052)		W					
Tinplate (371055)		W					
Railway track material (371067)		W					
Wire, plain (371070)	a	W	1.20	25.5	0.0	39000	4.62
Tubes, seamless (371076)		W					
Tubes, welded (371079)	a	W	2.77	64.1	0.7	44252	5.50
Steel castings in the rough state (371085)	a	W	0.18	4.1	0.0	7333	1.72
Steel forgings (371088)		W					
NON FERROUS METALS							
Copper, refined, unwrought (372004)	a	W	0.10	50.5	0.0	2200	4.65
Copper bars, rods, angles, etc. (372010 + 372013)		W					
Copper plates, sheets, strip and foil (372016)		W					
Copper tubes and pipes (372019)		W	0.03	100.0	0.0	0	14.96
Aluminium, unwrought (372022)		W	1.64	0.5	91.8	118333	36.84
Aluminium bars, rods, angles, etc. (372025 + 372028)		W					
Aluminium plates, sheets, strip etc. (372031)	a	W	0.39	10.4	0.0	15274	11.46
Aluminium tubes and pipes (372034)		W					
Lead, refined, unwrought (372037)	a	W	0.26	74.8	0.0	2879	0.99
Zinc, unwrought (372043)		W	0.14	100.0	0.0	0	3.31
Zinc plates, sheets, strip and foil (372046)		W	0.00	100.0	0.0	0	-22.36
Tin, unwrought (372049)		W					12.31

Source: Statistics and Survey Unit, UNIDO. Based on data supplied by the UN Statistical Office, with estimates by the UNIDO Secretariat.

Note: ISIC 311503 consists of 311510 + 311513 + 311516 + 311519 + 311522 + 311525 + 311528 + 311531 + 311534 + 311537. Growth rates have been calculated on the basis of available annual data over the period indicated.

a Data for 1983 not available.
b Data for 1981 n.av.

APPENDIX B

The approved and/or operational technical co-operation projects of UNIDO
(September 1985)

Arab Republic of EGYPT

Project Number	(Spec.Act.Code)		Project Title
DP/EGY/77/008**	IO/AGRO	(31.7.B)	Textile Development Centre (phase II of DP/EGY/73/020)
DC/EGY/78/003*	IO/ENG	(31.9.C)	Electronic Industries Research and Development Centre (phase II), electric machinery and equipment (multifund to DP/EGY/78/003)
DP/EGY/78/003*	IO/ENG	(31.9.C)	Electronic Industries Research and Development Centre (phase II), electric machinery and equipment (multifund to DC/EGY/78/003)
DP/EGY/80/014*	IO/CHEM	(32.1.C)	Industrial capacity utilization (Assistance to ISMADYE) (continuation of DP/EGY/77/005)
DP/EGY/80/018*	IO/FCTY	(31.4.C)	Management information system of the Arab contractors
DP/EGY/81/006**	IO/CHEM	(32.1.G)	Establishment of a multipurpose pesticide pilot plant
DP/EGY/81/010*	IO/AGRO	(31.7.C)	Sugar cane training and development centre
DC/EGY/81/011	IO/TRNG	(31.5.A)	Industrial training advisory services (Phase II of DP/EGY/77/006) (multifund to DP/EGY/81/011)
DP/EGY/81/011*	IO/TRNG	(31.5.A)	Industrial training advisory services (phase II of DP/EGY/77/006) (multifund to DC/DGY/81/011)
DC/EGY/81/012	IO/MET	(31.8.C)	Managed maintenance in metallurgical industries (multifund to DP/EGY/81/012)

---

* Large-scale project (= total allotment $150,000 or above).
** Total allotment $1 million or above.

The approved and/or operational technical co-operation projects of UNIDO
(September 1985) (continued)

Arab Republic of EGYPT

Project Number	(Spec.Act.Code)		Project Title
DP/EGY/81/012*	IO/MET	(31.8.C)	Managed maintenance in metallurgical industries (multifund to DC/EGY/81/012)
DP/EGY/81/016*	IO/CHEM	(32.1.H)	Engineering for petroleum and processing industries
DP/EGY/81/028*	IO/FCTY	(31.4.E)	Industrial consultancy services
DC/EGY/81/029*	IO/CHEM	(32.1.H)	Plastics development centre for agricultural purpose (multifund to DP/EGY/81/029)
DP/EGY/81/029*	IO/CHEM	(31.1.H)	Plastics development centre for agricultural purpose (multifund to DC/EGY/81/029)
DC/EGY/83/001*	IO/ENG	(31.9.C)	Energy conservation in industry (multifund to DP/EGY/83/001)
DP/EGY/83/001*	IO/ENG	(31.9.C)	Energy conservation in industry (multifund to DC/EGY/83/001)
SF/EGY/83/001*	IO/CHEM	(32.1.A)	Assistance to the Suez Cement Company
SI/EGY/84/801	IO/CHEM	(32.1.G)	Assistance in the commissioning of the pesticide pilot plant
SI/EGY/85/801	IO/CHEM	(32.1.D)	Technical assistance to the Egyptian National Centre for Genetic Engineering and Biotechnology
SI/EGY/85/802	IO/ENG	(31.9.C)	Dry batteries factories
DP/EGY/85/004	IO/MET		Managed maintenance system

* Large scale project (= total allotment $150,000 or above).
** Total allotment $1 million or above.

APPENDIX C

Main provisions of Investment Law No. 43 of 1974[1/]

- Projects may not be nationalized or confiscated. Assets of projects may not be seized, blocked, confiscated, or sequestrated except by judicial procedures.

- Disputes can be settled in accordance with international or bilateral agreements or by a mutually agreed-upon arbitration.

- Approved projects are deemed to be in the private sector even if co-owned by an Egyptian public company, and are exempt from laws applicable to the public sector.

- Investments outside free zones must be undertaken with public or private Egyptian participation, except in: (a) branch banks confined to foreign currency transactions; and (b) projects approved for full foreign ownership by a two-thirds vote of the Board of Directors of the Investment Authority. No specific proportion of required Egyptian participation is included in this law.

- Egyptian law requiring labour representation on boards of directors is not applicable to companies formed under the new investment law; the company statutes will indicate how labour will participate in management.

- Approved projects are exempt from the Egyptian law specifying the percentage of company profits which must be distributed to employees, although some arrangement for sharing profits with employees should be specified.

- Employees of approved projects come under the Egyptian Social Insurance Law unless the project provides superior protection.

1/ Extracts from General Authority for Arab and Foreign Investment and Free Zones, Egypt: An Investment Guide, 1975.

Appendix C (continued)

- Approved projects may maintain foreign exchange accounts in banks registered in Egypt and use such accounts for business transactions without special permit or authorization.

- Imports of approved projects for business requirements may enter without licensing, subject to routine customs inspection.

- Approved projects may request repatriation of profits along the following lines:

(i) projects which are self-sufficient in their foreign exchange needs may transfer their annual net profits within the limits of the proceeds of the projects exports;

(ii) basic projects of major national economic importance may transfer all their profits abroad, irrespective of exports.

- Exemption from the following taxes is provided to approved projects for a period of five years:

(i) tax on company profits;

(ii) proportional stamp duty on shares; and

(iii) tax on revenues from movable capital.

These exemptions remain applicable as long as the profits of the project are not as a consequence subject to taxation in the foreign investor's home country or in any other country.

Tax exemptions may be extended to eight years upon approval of the Council of Ministers.

Profits distributed by approved projects enjoy total exemption from the general tax on income for the same period of time that applies to the exemption from the tax on company profits (five to eight years). At the end of that period, distributed profits up to five per cent of the taxpayer's share in the project's invested capital are exempted from the general tax on income.

Appendix C (continued)

- Foreign experts and employees are permitted to transfer abroad up to 50 per cent of their gross earnings.

- Capital invested in an approved project by a foreign investor may be withdrawn in accordance with the provisions of the investment law.

- Articles of incorporation of joint venture companies established under the investment law are subject to approval by the Investment Authority. The statutes of the company should follow the model approved by the Council of Ministers. A copy of this model is available from the Authority.

Some of the more important privileges and provisions affecting free zones created under the new investment law are as follows:

- All free zones (public or private) are under the ultimate supervision of the Investment Authority's Board.

- Private free zones may be created for a single project.

- Licenses for occupation of free zones may be granted for storage, sorting, cleaning, mixing, blending, repacking, manufacturing, assembling, mounting and renewing of goods, and for trades assisting such activities or intended for the comfort of employees in the zone.

- Licenses may be assigned with approval from the Investment Authority.

- Goods entering or leaving free zones, and instruments, equipment, and machinery needed by authorized establishments, are exempted from usual customs procedures taxes and duties. Local goods entering free zones are subject to export and other taxes unless permitted temporary entry for repair or complementary operations, in which case a customs tax is payable in respect of the repair or other operation. Goods withdrawn from the free zones for local consumption are subject to local customs and other import regulations, with allowance made for that portion of such goods containing local material.

Disputes arising between projects in free zones and between such projects and the Investment Authority or other administrative body may be submitted, by agreement, to arbitration.

Appendix C (continued)

- Free zone projects are exempt from all Egyptian taxes, but must pay an annual duty equal to 1 per cent of the value of goods entering or leaving the zone for account of the project, or if no such activity is conducted by the project, must pay an annual duty not exceeding 3 per cent of the project's annual value added.

- Compensation and other payments to foreign employees of free zone projects are exempt from the general tax on income.

- The guarantee of Law No. 43 against nationalization of projects and against confiscation of assets, etc., except through judicial procedure, is extended to free zone projects.

- Free zone transactions, including those with other countries, are exempt from Egyptian exchange control regulations.

- Free zone projects are exempt from certain Egyptian labor and company laws; however, the Social Insurance Law remains applicable unless superior protection is provided by the project. Projects must develop appropriate training programmes for free zone employees. Rules governing minimum wages, working hours, and other employment matters within the free zones have been established by executive regulation.

APPENDIX D

Leading companies in Egypt, 1984

(values in million US dollars)

	Company	Type of business	Sales/ turnover	Profit	Employees	Total Net Assets
1	Suez Canal Company	Canal Company	957.00	...	...	...
2	El Nasr Import & Export	Food/chemicals/ textiles/timber	734.72	8.901	1,500	4.902
3	Egyptian General Petroleum Corp	Oil and gas	679.70	279.29	35,429	178.20 (fixed assets)
4	Egyptair	Airline	498.89	...	...	...
5	Eastern Tobacco Co (2)	Tobacco	441.5	0.22	9,450	62.70
6	Egyptian Iron & Steel Co	Iron & steel	258.00	...	...	...
7	Alcotan Cotton & Trading & Export Co	Cotton	72.134	1.25	1,000	96.14
8	Biscomisr (3)	Food	60.13	...	4,000	...
9	Misr Shebin el Kom Spinning & Weaving	Cotton	45.53	2.68	10,094	4,283
10	Kaha	Preserved foods	43.00	0.57	5,000	39.00
11	General Metals Co	Metal production	41.42	1.30	1,800	46.49
12	Alshanti	Plastics/woven sacks	36.08	...	1,200	12.03
13	Al Tahir Printing & Publishing House	Printing & publishing	35.71	2,500	2.86	...
14	Helwan Diesel Engines Co	Diesel engines	35.00	...	2,600	17.14
15	General Nile Co for Construction & Paving	Contracting/ construction	27 98	0.67	1,300	25.34
16	National Paper Co	Paper	23.56		2,500	36.98
17	Alexandria Shipyard	Shipbuilding/ ship repair	22.00	0.50	6,700	

Appendix D (continued)

	Company	Type of business	Sales/ turnover	Profit	Employees	Total Net Assets
18	Alexandria Passengers Transport Authority	Public transport	21.53		7,900	102.29
19	Gen. Co for Production of Ceramics & Porcelain	Ceramics/ porcelain	18.80	2.20	2,400	60.90
20	Soc. Egyptienne de Publicite (SEP)	Advertising	14.29	2.14	600	13.14
21	Ladheen Plastics Industries	Polypropylene	10.71	1.86	450	10.00

Source: South, November 1985.

APPENDIX E[a/]

UNIDO Industrial investment project proposals, 1984

ISIC	Project Number	Project Title
3112	085/V/84-11	Dairy Products (El Tal El Kebeer)
3112	086/V/84-11	Dairy Products (Shoubra El Namla)
3112	087/V/84-11	Dairy Products (Sadat City)
3113	089/V/84-11	Fruit and Vegetable Processing
3113	090/V/84-11	Tomato Concentrate
3113 3115	091/V/84-11	Fruit and Vegetable Canning (El Tal El Kebeer)
3115	092/V/84-11	Vegetable Oil Mill
3122	093/V/84-11	Animal Fodder
3211	094/V/84-11	Fine Flax Weaving Yarn
3411	095/V/84-11	Leather Fibreboard
3220 3231 3240	096/V/84-11	Leather Products
3240	097/V/84-11	Footwear
3240	098/V/84-11	Footwear
3311	099/V/84-11	Plywood and Veneer
3311	100/V/84-11	Particle Board
3320	101/V/84-11	Wooden Furniture
3411	102/V/84-11	Paper and Paperboard
3412	103/V/84-11	Egg Trays
3419	104/V/84-11	Self-Adhesive Products
3511	106/V/84-11	Hydrogen Peroxide
3521	107/V/84-11	Paints for the Construction Industry

Appendix E (continued)

ISIC	Project Number	Project Title
3511	108/V/84-11	Tin Tantalum and Niobium Processing
3511 3512	109/V/84-11	Chemicals Production
3529	110/V/84-11	Carbon Black
3529	111/V/84-11	X-Ray and Graphic Art Film
3620	112/V/84-11	Glass Containers
3620	113/V/84-11	Pharmaceutical Ampoules
3620	114/V/84-11	Neutral Glass Pipes
3620	115/V/84-11	Float Glass
3691	116/V/84-11	Clay Bricks
3699	117/V/84-11	Phosphoric Gypsum
3699	118/V/84-11	Gypsum Plaster and Blocks
3699	119/V/84-11	Aerated Concrete Blocks
3699	120/V/84-11	Sand Bricks
3529 3699 3839	121/V/84-11	Graphite Products
3699	122/V/84-11	Asbestos Cement Pipes
3710	125/V/84-11	Pig Iron and Titanium Slag
3710	126/V/84-11	Special Steel
3710	127/V/84-11	Processing of Iron and Steel Scrap
3710	128/V/84-11	Seamless Steel Pipes
3813	129/V/84-11	Agricultural Steel Structures
3710	130/V/84-11	Sponge Iron and Steel Reinforcing Bars
3710	131/V/84-11	Iron and Steel Rolls

Appendix E (continued)

ISIC	Project Number	Project Title
3720	132/V/84-11	Aluminium Foil
3823 3824	133/V/84-11	Special Steel Tools
3813	134/V/84-11	Steel Lighting Poles
3813	136/V/84-11	Struts and Steel Bars for the Construction Industry
3829	138/V/84-11	Refrigerator Compressors
3829	140/V/84-11	Mobile Air-Conditioning Units
3832	141/V/84-11	Television Picture Tubes
3839	142/V/84-11	Lamps and Bulbs
3839	143/V/84-11	Dry Batteries
3851 3852	144/V/84-11	Microscopes and Other Medical Appliances
3119	147/V/84-11	Confectionery
3134	148/V/84-11	Soft Drinks
3211	149/V/84-11	Velvet
3213	150/V/84-11	Knitwear
3219	151/V/84-11	Laminated Textiles
3220	152/V/84-11	Overalls
3220	153/V/84-11	Ladies' Garments
3220	154/V/84-11	Men's Garments
3529	155/V/84-11	Chemicals for the Textile Industry
3560	156/V/84-11	Plastic Components
3560	157/V/84-11	Thermoplastic Mouldings for Household Utensils

Appendix E (continued)

ISIC	Project Number	Project Title
3560	158/V/84-11	Thermoplastic Mouldings for the Construction Industry
3560	159/V/84-11	Plastic Bags
3560	160/V/84-11	Plastic Egg Trays
3610	161/V/84-11	Ceramic Components
3824	162/V/84-11	Tools Manufacture
3824 3843	163/V/84-11	Precision Metal Components
3811	164/V/84-11	Agricultural Hand Tools
3710 3720	165/V/84-11	Aluminium and Steel Sheet Profiles
3829	166/V/84-11	Aluminium Ventilation/Air Conditioning Components
3829	167/V/84-11	Assembly of Air Conditioners and Ventilators
3831	168/V/84-11	Contact Breakers for the Automotive Industry
3831	169/V/84-11	Electric Motor Repair and Maintenance
3843	170/V/84-11	Automobile Windscreen Wiper Blades
3909	171/V/84-11	Toothbrush Production

a/ This list includes industrial projects in Egypt for which foreign co-operation, such as joint venture or other partnerships, acquisition of technology, management expertise and marketing assistance, is sought. Enterprises interested in the possibility of participating in any of these projects can obtain more detailed information, including the name and address of the sponsor, from UNIDO. This information usually takes the form of a standard industrial investment project questionnaire. Copies of studies, when these are available, may then be obtained from the project sponsor. UNIDO does not accept responsibility for accuracy or completeness.

APPENDIX F

Industrial investment opportunities in Egypt, 1985

I. Food Industry

- I.1 Dairy products
- I.2 Agro-industrial complex for canned & frozen food
- I.3 Two soybean & sunflower processing plants for edible oil production
- I.4 Extraction of edible oil from imported oil seed

II. Textile Industries

- II.1 Ready-made garments
- II.2 Synthetic fibres production

III. Chemical Industries

- III.1 Phosphpric gypsum
- III.2 Footwear project
- III.3 Carbon black project
- III.4 Pure anthraquinone of dyestuff grade project

IV. Engineering, Electrical & Electronic Industries

- IV.1 Miscellaneous automotive components
- IV.2 Centrifugal pumps
- IV.3 Special tools
- IV.4 Production ot eccentric presses
- IV.5 Lamps manufacturing
- IV.6 Air conditioning units for mobile services
- IV.7 Refrigeration compressors
- IV.8 Capital goods

V. Metallurgical Industries

- V.1 Production of cast iron & cast steel rolls
- V.2 Steel reinforcing bars & rods
- V.3 Special steel production
- V.4 Seamless pipes
- V.5 Formed steel structures from pipes & hollow sections
- V.6 Manufacturing of steel lighting poles
- V.7 Production of aluminium foll
- V.8 Scrap processing project

VI. Mining and Refractory Projects

- VI.1 Marsa Matrouh chemical project
- VI.2 Cebeka chemical complex in Sinai
- VI.3 Maghara coal mines
- VI.4 Tin tantalum & niobium deposits
- VI.5 Black sand deposits
- VI.6 Abu Ghalaka limenite project
- VI.7 Production of neutral glass pipes
- VI.8 Production of float glass
- VI.9 Glass containers
- VI.10 Production of pharmaceutical ampoules
- VI.11 Picture tube manufacturing for B/W and coloured TV sets

VII. Small-scale Industries

- VII.1 Industrial estate in tenth of Ramadan City

Source: Investment Review, A Quarterly Journal on Investment Conditions in Egypt, October 1985.

Selected References

Arab Daily, June 1, 1985.

Arab Monthly, No. 76, November 1985.

Arab Oil and Gas, 16 June 1985.

Business International, "Middle East Foreasting Study, 1984-1988," September 1984.

The Economist Intelligence Unit, Egypt in the 1980s: the Challenge, Special Report No. 158, 1984.

General Authority for Arab and Foreign Investment and Free Zones, Egypt: An Investment Guide, 1975.

IMF Survey, March 17, 1986.

Investment Review, A Quarterly Journal on Investment Conditions in Egypt, October 1985.

Lloyds Bank, Egypt, Economic Report, 1985.

Mining Annual Review, London, 1985.

OAPEC, Oil and Arab Co-operation, "The Petrochemical Industry", Vol. 11, No. 1, 1985.

South, November 1985.

UNIDO, Changing Patterns of Trade in World Industry, 1982.

World Bank, Arab Republic of Egypt: Issues of Trade Strategy and Investment Planning, Report No. 4136-EGT, January 14, 1983.

World Bank, Egypt: a Programme for the Development of Manufactured Exports, Export Potential and Prospects of the Engineering Industries, 1983.

World Bank, Macroeconomic Effects of Efficiency Pricing in the Public Sector in Egypt, Staff Working Paper No. 726, April 1985.

World Bank, World Development Report, 1985.