OCCASION

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

TOGETHER

for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as "developed", "industrialized" and "developing" are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

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

15824-E

Distr.
LIMITED
UNIDO/IS.644
17 July 1986
ENGLISH

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

INDUSTRIAL DEVELOPMENT REVIEW SERIES

ZAIRE

Prepared by the
Regional and Country Studies Branch

V.86-58467

INDUSTRIAL DEVELOPMENT REVIEW SERIES

ZAIRE

Preface

This series of industrial development reviews on developing countries is prepared within the framework of UNIDO Regional and Country Studies. 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 APPENDIX TABLES

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:

ADB	African Development Bank
ANEZA	Association National des Entreprises Zairoises
BZ	Banque du Zaire
DMEC	Developed Market Economy Country
EEC	European Economic Community
EIB	European Investment Bank
GDP	gross domestic product
GNP	gross national product
hl	hecto litre
ICO	International Coffee Organization
IDA	International Development Association
IMF	International Monetary Fund
MVA	manufacturing value added
MW	megawatt
OECD	Organization for Economic Cooperation and Development
SOFIDE	Société Financière de Développement
SSI	Small-Scale Industry
SDR	Special Drawing Right
Z	Zaire (national currency)
ZOFI	Zone Franche d'Inga

BASIC INDICATORS 1
The economy

GDP:	$5,732 million (1985)[a]
GDP per capita:	$188 (1984)[b]
Population:	29.7 million[b]
Density:	12.7 inhabitants per sq. km. (1984)
Labour force:	14.5 million (1984)[b]
Average annual growth of population (per cent):	2.5 (1973-83)

Structure of production[c]: (percentage share)	1979	1984
Agriculture:	31.0	31.7
Manufacturing:	3.8	2.0
Mining:	16.1	24.8
Services (inc. other):	49.1	41.5

Average annual growth of GDP: (per cent)	1963-73	1973-81	1981	1982	1983	1984	1985
	4.4	-2.8	2.9	-3.0	1.2	2.8	2.5

Rate of inflation: (per cent)	1965-72	1973-83	1984	1985[d]
	18.7	48.2	52.2	39

Exchange rates (averages): (Zaire equivalent to $1)	1982	1983	1984	1985	Feb. 1986
	5.75	12.89	36.13	49.87	55.8

a/ Estimate based upon 1983 as base year and growth rates for 1984 and 1985.
b/ The provisional result of the July 1984 national census.
c/ Data from the Banque du Zaire, calculated from GDP at current prices.
d/ Estimate.

BASIC INDICATORS 2
Resources and transport infrastructure

Resources
(1984 production levels in thousands of tons)

Main crops:	Palm oil (86), coffee (82), rubber (15), cocoa, tea, sugar, rice, maize, bananas, tobacco, cassava and cotton
Mining:	Copper (500), zinc (66), cobalt (9), and diamonds (18.5 million carats)
Energy:	Crude oil (11.7 million barrels), electricity (4.7 million kw)
Share of total commercial energy consumption (1983):	Oil: 38 per cent Hydroelectricity: 53 per cent

Transport

Roads:	145,000 km (estimate)
Railways:	4,870 km
Waterways:	13,700 km
Main ports:	Matadi, Kinshasa and Kalemie
Main airports:	Kinshasa, Lubumbashi, Kisangani, Goma and Gbadolite

BASIC INDICATORS 3
Foreign trade and balance of payments

Merchandise exports:

total value:	$1,842.5 million (1985)[a/]
main commodities: (1984)	Copper ($670 million), crude oil ($320 million), diamonds ($230 million), cobalt ($220 million), coffee ($210 million)
main destinations:	Belgium, USA, Federal Republic of Germany, Italy and France

Merchandise imports:

total value:	$1,196.5 million (1985)[a/]
main commodities:	machinery and transport equipment, maize, wheat and petroleum products
main origins:	Belgium, USA, Federal Republic of Germany and France

Trade surplus:	$329 million (1982) $409 million (1983) $617 million (1984) $646 million (1985)[a/]
Balance of payments: (current account deficit)	$369 million (1982) $312 million (1983) $229 million (1984)

Public/publicly guaranteed disbursed debt ($ billion):	1974	1981	1982	1983	1985	Feb. 1986
	1.3	4.1	4.0	4.0	4.5	4.7

Debt service:	1974	1981	1982	1983	1984[a/]
as percentage of GNP:	5.6	3.7	2.7	2.9	11.3
as percentage of exports:	12.0	12.3[a/]	8.9[a/]	7.8[a/]	35.2[a/]

International liquidity: (reserves less gold)	$190 million (1985)

a/ Estimates.

BASIC INDICATORS 4
The manufacturing sector

Manufacturing value added: (at 1975 prices)	\$212 million (1985
MVA per capita:	\$15 (1973) \$7 (1981)
Employment in manufacturing:	70,239 persons (1985)

Average annual growth of MVA: (per cent)	1963-73	1973-81	1981	1982	1983	1984	1985 b/
	12.5	-7.2	0.7	-10.8	-0.5	3.8	9.8

Sectoral composition of MVA: (per cent)	1979	1984
Consumer goods:	66.0	62.6
Components and machinery:	26.5	35.3
Petroleum refining:	7.5	2.1

Share of manufacturing in total employment in productive sectors:	13.6 per cent (1983)

a/ Estimate.
b/ First half of 1985.

BASIC INDICATORS 5
Inter-country comparison of selected indicators

	Unit	Central African Republic	Kenya	Tanzania	Uganda	Zaire
I. Demographic indicators a/						
Population (mid-1983)	million	2.5	18.9	20.8	13.9	29.7
Population growth (1973-83)	per cent per annum	2.3	4.0	3.3	2.8	2.5
Infant mortality (1983)	per thousand	142	81	97	108	106
Area	thousand km^2	623	583	945	236	2,345
Density (1983)	persons per km^2	4.0	32.4	22.0	58.9	12.7
II. Economic indicators a/						
GDP (1983)	$ million	600	4,940	4,550	3,360	5,440
GDP *per capita* (1983)	$	240	260	220	240	180
GDP growth (1973-83)	per cent per annum	1.0	4.6	3.6	-2.1	-1.0
Agriculture (1983)	per cent of GDP	37	33	52	82	36
Industry (1983)	per cent of GDP	13	9	6	-	18
Manufacturing (1983)	per cent of GDP	8	12	9	4	2
Services (1983)	per cent of GDP	42	46	33	14	44
Exports of goods and non-factor services (1983)	per cent of GDP	23	25	11	5	33
Gross domestic investment (1983)	per cent of GDP	11	21	20	8	24
External public debt (1983)	per cent of GNP	33.1	43.1	58.9	17.9	91.5
III. Industrial indicators b/						
MVA (1981)	million $ at constant 1975 prices	29	536	151	81	253
MVA *per capita* (1981)	$ at constant 1975 prices	22	34	9	11	7
Share of MVA in GDP (1981)	per cent	13.1	13.3	5.8	4.3	6.2
Growth of MVA (1973-81)	per cent	1.5	6.8	-2.8	-5.8	-7.2
Contribution to World MVA (1981)	per cent	...	0.03	0.01	0.01	0.01
Share of manufactures in total exports c/ (1982)	per cent	26.2 d/	11.4	10.6 e/	0.4 f/	3.2 g/

a/ Data from World Development Report 1985.
b/ Data from UNIDO.
c/ SITC 5-8 less (67 + 68).
d/ 1980.
e/ 1981.
f/ 1976.
g/ 1979.

Executive Summary

The performance of the Zairian manufacturing sector has been constrained in the past decade by at best static demand, low levels of investment and by shortages of foreign exchange. Since 1983 Zaire has concluded two rescheduling accords with its creditors and signed two standby agreements with the IMF.

Zaire has responded to these agreements by introducing a recovery programme of wide-ranging changes in economic policy. The Government has floated the currency, the Zaire, liberalized import regulations, profit repatriation and interest rates, abandoned most price controls, privatized some public sector enterprises and encouraged the private sector. Zaire's bilateral and multilateral partners have supported the new policies with commitments to increase capital inflows in loan, grant and equity form.

Manufacturing accounted for 3.8 per cent of GDP in 1979 and 2.0 per cent in 1984. There are currently indications of renewed growth in manufacturing value added. Structurally, the sector has hardly changed in the past decade and is dominated by the consumer goods industries. Regionally, there is a marked imbalance with manufacturing activity heavily concentrated in three regions. Ownership reflects the almost complete predominance of the private sector and, in the case of the larger enterprises, a substantial presence of multinational companies. A traditionally open economy and strong links with foreign business interests have produced an enormous capacity for imports, both raw materials and finished goods.

The 1986-90 Plan projects an ambitious public sector investment programme with an emphasis on the infrastructure to encourage a decentralization of manufacturing activity. Its target of economic growth is designed to increase purchasing power. While it leaves development of manufacturing to the private sector, it aims at creating an environment of economic stability to attract new investment.

Zaire's wealth of natural resources in energy, minerals and agriculture offers opportunities to increase processing capacity. At present, agricultural resources tend to be exported with a minimum of processing. The manufacturing sector is still some distance from being sufficiently developed to consume more than a fraction of Zairian minerals. However, there are a number of natural resources which could be processed domestically. The foreign exchange aspect is vital because, although export performance has improved in general since the currency floatation, resources are required for a consistently heavy burden of debt service. Import substitution is a priority of the Plan as a source of foreign currency savings but also as a means to generate productive employment.

Domestic demand growth would enable the manufacturing sector to expand. The sector could also seize the opportunities that appear to lie in the sub-regional markets. The 1986-90 Plan, which envisages an average annual growth rate of 8 per cent for the industrial sector, calls for government assistance in industrial promotion, extension of the infrastructure, decentralization of the manufacturing sector and the matching of natural and energy resources with sectoral needs. Zaire seeks external assistance to stimulate renewed growth in the manufacturing sector.

Note de synthèse[1/]

Au cours de la décennie écoulée, le secteur manufacturier zaïrois a pâti d'une demande restée au mieux statique, de faibles niveaux d'investissement et de pénuries de change. Depuis 1983, le Zaïre a conclu deux accords de réaménagement avec ses créanciers et a signé deux accords standby avec le FMI.

Dans le prolongement de ces accords, le Zaïre a arrêté un programme de redressement comportant des changements profonds de sa politique économique. Le gouvernement a laissé flotter la monnaie, le zaïre, assoupli les restrictions à l'importation ainsi que la réglementation concernant le rapatriement des bénéfices et les taux d'intérêt, libéré la plupart des prix, privatisé quelques entreprises publiques et encouragé le secteur privé. Les partenaires bilatéraux et multilatéraux du Zaïre ont appuyé les nouvelles orientations en s'engageant à accroître leurs apports de capital, qu'il s'agisse de prêts, de dons et de prises de participations.

Le secteur manufacturier a assuré 3,8 % du PIB en 1979 et 2 % en 1984. Certains indices permettent de conclure à une reprise de la croissance de la valeur ajoutée dans ce secteur, dont les structures n'ont guère évolué au cours de la dernière décennie et qui produit surtout des biens de consommation. Sur le plan régional, il existe des déséquilibres marqués, l'activité manufacturière demeurant concentrée dans trois régions. La structure de la propriété traduit la prédominance quasi absolue du secteur privé et, s'agissant des entreprises les plus importantes, une présence massive des sociétés multinationales. Le caractère traditionnellement ouvert de l'économie et l'existence de liens étroits avec les milieux d'affaires étrangers ont créé une énorme demande d'importations, aussi bien de matières premières que de produits finis.

Le Plan pour 1986-1990 comporte un programme ambitieux d'investissements publics - en particulier dans l'infrastructure - en vue d'encourager la décentralisation des activités manufacturières. Son objectif de croissance économique est l'augmentation du pouvoir d'achat. Tout en laissant au secteur privé, le soin de développer l'industrie manufacturière, il vise à créer un climat de stabilité économique en vue d'attirer de nouveaux investissements.

1/ Une traduction française de ce document paraîtra sous peu.

Le Zaïre est riche en ressources naturelles - énergétiques, minérales et agricoles - et offre donc des possibilités d'accroître les capacités de transformation. A présent, les ressources agricoles sont le plus souvent exportées après n'avoir subi qu'un minimun de transformation. Le degré de développement du secteur manufacturier demeurant insuffisant, celui-ci ne peut consommer qu'une faible fraction des ressources minérales du pays. Toutefois, il existe un certain nombre de ressources naturelles qui pourraient être transformées sur place. Bien que les exportations aient en général progressé depuis la mise en flottaison de la monnaie, le problème des devises demeure essentiel, car il faut toujours des ressources pour assurer le service de la dette dont le fardeau ne s'est pas allégé. Une des priorités du Plan est le remplacement des importations en tant que moyen non seulement de réaliser des économies de change mais aussi de créer des emplois productifs.

Une expansion de la demande intérieure permettrait au secteur manufacturier de se développer. Le secteur pourrait aussi saisir les possibilités que semblent offrir les marchés sous-régionaux. Le Plan pour 1986-1990, qui envisage une croissance annuelle moyenne de 8 % pour le secteur industriel, préconise les mesures suivantes : aides publiques à l'industrie, extension de l'infrastructure, décentralisation du secteur manufacturier et exploitation des ressources naturelles et énergétiques en fonction des besoins du secteur. Le Zaïre recherche une assistance extérieure en vue de relancer la croissance du secteur manufacturier.

1. THE ZAIRIAN ECONOMY

1.1 Economic structure

With GNP per capita estimated at $170 in 1983, Zaire is classified as a low-income economy and the fifth poorest country in the world. Its economic performance has been poor, GNP per capita having shrunk by an average 0.3 per cent annually in 1960-82. Besides having the fifth lowest [illegible] per capita among low-income economies, its GDP growth record in 1973-83 was the weakest with the exception of Uganda, Ghana and Chad. Its MVA per capita was very low and its external public debt, expressed as a percentage of GNP, by far the highest with the exception of Togo. Nonetheless its structure of production is relatively diversified on account of significant contributions from agriculture (36 per cent of GDP in 1983) and industry (18 per cent - principally mining). Zaire also has a markedly open economy with an export/GDP ratio of 33 per cent in 1983. The comparative indicators with four other African countries (the Central African Republic, Kenya, Tanzania and Uganda) show Zaire to be the most populated but the second lowest in density.

The economic structure of Zaire reveals sharp regional and sectoral imbalance. Economic development has been far from uniform in this large country. Government and private resources have been concentrated in the capital Kinshasa and the neighbouring region of Bas Zaire, and in the minerally rich, southern region of Shaba. In addition, an important subsistence sector exists, principally in agriculture. This uneven development may be explained by the easy access to central Government, supplies of energy and natural resources.

Sectoral changes in the economic structure are illustrated in Table 1, which shows the origins of GDP at current prices in 1979 and 1984. Perhaps the most striking feature is that the subsistence sector has fallen only marginally from 19.2 per cent of total GDP in 1979 to 18.1 per cent in 1984. However, within money GDP there has been a considerable fall in the contribution of services, including the public sector, from 24.9 to 15.3 per cent with a corresponding increase in the share of mining and metallurgy from 16.1 to 24.8 per cent. The higher weighting of the productive sectors has

Table 1. Industrial origins of GDP at current prices, 1979 and 1984
(value added in Z millions)

	1979	(per cent)	1984	(per cent)
Agriculture a/	1,313.3	11.8	13,515.2	13.6
Mining and metallurgy	1,786.7	16.1	24,713.4	24.8
Manufacturing	419.2	3.8	1,953.2	2.0
Construction and public works	226.9	2.0	3,341.6	3.4
Electricity and water	11.0	0.1	46.7	—
Transport and telecommunications	104.4	0.9	999.7	1.0
Services b/	2,768.4	24.9	15,221.4	15.3
Trade	2,044.3	18.5	18,523.9	18.6
Banks	-66.3	(-0.6)	-297.1	(-0.3)
Indirect taxes	258.7	2.3	1,825.1	1.8
Money GDP a/	8,866.6	79.8	79,843.1	80.2
Subsistence agriculture	2,129.5	19.2	18,069.5	18.1
Construction in the subsistence sector	108.9	1.0	1,670.8	1.7
GDP at market prices	11,105.0	100	99,583.4	100

Source: Banque du Zaire.

a/ Formal (cash) economy only.
b/ Including public sector.

favourable implications for employment and export performance. At the same time, the contribution of manufacturing has fallen from 3.8 to 2.0 per cent.

Minerals have traditionally provided the greater part of export revenue. Although copper accounted for more than 35 per cent of export earnings in 1984, four other commodities (crude oil, diamonds, cobalt and coffee) each supplied more than 10 per cent of the total. The degree of diversification protects Zaire from the worst results of volatile commodity markets. Coffee is the only substantial agricultural export. The Banque du Zaire (BZ - the Central Bank) has shown manufacturing exports at less than 2 per cent of the total in 1984. Untapped mineral and agricultural resources are extensive.

1.2 Recent economic trends

Government economic policy since the 1960s may broadly be divided into two distinct phases. The nationalization of the largest industrial company, the mining conglomerate now called Gécamines, in 1967 was the first in a series of measures to increase Zairian ownership and control of the economy. The Government adopted the role of centralized planner with the aim of advising an industrial transformation of the economy. To this end it embarked upon projects in the heavy industrial sector, notably the Inga hydroelectricity complex in Bas Zaire, the Sozir oil refinery and the Maluku metallurgical plant. The programme was reinforced by wide ranging measures of Zairianization in 1973 and 1975 which brought ownership of several key sectors, such as plantations, textiles and distribution, into private Zairian and then State control. Implementation of this policy was financed by substantial increases in budget spending and by external borrowing. Sharp falls in commodity prices after 1974, especially of copper, and the growing burden of debt service were instrumental in prompting a change in policy which was formalized with the introduction of a recovery programme in consultation with the IMF in 1983.

The currency, the Zaire (Z), was floated after a substantial devaluation in September 1983. The Government has since removed the majority of price controls and import restrictions. It has liberalized interest rates, profit repatriation and agricultural producer prices. The programme involves a significant withdrawal of the State from its previously commanding role in the economy, illustrated by the decision in June 1985 to abolish the monopoly of the parastatal Petrozaire in the import of petroleum products and by continuing negotiations over the privatization of certain state enterprises. The Government has reduced its level of intervention in the management of those industries, such as Gécamines, of which it will retain control for strategic reasons. The recovery programme aims to create an environment of economic stability by containing state expenditure, including public salaries, by controlling the money supply and by maintaining ceilings on bank lending.

Earliest indications of the recovery programme in operation suggest a number of notable successes. Provisional estimates point to real economic growth of 2.5 per cent in 1985, giving three years of sustained growth. It needs to be recalled, however, that the average annual rate of population growth to the year 2000 is projected at 2.3-3.0 per cent. The performance of key exporting industries, such as Gécamines, has greatly improved as a result of the currency flotation. Stronger monetary discipline and lower inflation have combined to prompt a higher level of private investment.

The aims of the recovery programme form the base of the 1986-90 Plan for Socio-economic Development. The Government will pursue its current policies of economic liberalism, decentralization and the encouragement of private enterprise. The principal Plan target is the attainment of average annual growth of 4.0 per cent. Sectorally the Plan establishes the priority of the productive industries and the infrastructure. It projects average growth of 8.0 per cent in industry and public works/construction, 6.0 per cent in transport/telecommunications and 4.5 per cent in commercial agriculture. The Plan shows (Table 2) public sector investments at Z166 billion (at 1985 prices) in 1986-90. The substantial investment in mining reflects the 1984-88 Gécamines development plan and in transport the sixth highways project and the current railways programme. Planned public sector investments will be financed by budget allocations (Z20 billion), by other internal sources (Z53.3 billion - largely self-finance) and by external loans and grants (Z92.7 billion). The Government has already secured foreign commitments totalling $1.09 billion out of the planned finance of $1.85 billion at current exchange rates. In regional terms, Shaba is projected as receiving 19.6 per cent of public sector investments, Kinshasa 9.5 per cent and intra-regional programmes 49 per cent.

The Department of Planning has calculated private sector investment in 1986-90 at Z95 billion (at 1985 prices) on the basis of consultations with the corporate sector in Zaire, commercial banks and potential investors. This will be examined at greater length in chapter 3.

Table 2. Sectoral allocations in the 1986-90 public sector investment plan (at 1985 prices)

	Spending (Z billion)	Per cent of total
Productive sectors	58.3	35.0
Agriculture	20.0	12.0
Mining and hydrocarbons	38.3	23.0
Infrastructure	89.7	54.1
Electricity	15.6	9.4
Water	9.4	5.7
Transport	57.7	34.8
Communications	7.0	4.2
Social services	13.0	7.9
Health	6.4	3.9
Education	6.6	4.0
Miscellaneous	5.0	3.0
Total	166.0	100.0

Source: Department of Planning.

1.3 Overview of the manufacturing sector

The manufacturing sector achieved average annual growth of 12.5 per cent in 1963-73 and then declined by an annual average of 7.2 per cent in 1973-81. This decline had a number of sources: irregular access to foreign exchange for the import of essential inputs, at best static domestic demand, a generally low level of capital investment against a background of inflation and currency weakness, and the deterioration of subregional markets

As with the structure of production, the importance of manufacturing is not substantial in terms of employment. The incomplete statistics covering employment by productive sector in Table 3 are based on a survey of major enterprises. The inclusion of small businesses, many in the building, commerce and distribution sub-sectors, would have the effect of diluting the manufacturing sector's share of the total from its level of 13.6 per cent in 1983. The proportion would fall further if the survey covered the subsistence sector. There is no information available on the average size of manufacturing enterprises. (The largest employer other than Central Government is Gécamines with a work force of 33,500 persons.)

Table 3. Employment by productive sector,[a/] 1978 and 1983

	1978 (Per cent)		1983 (Per cent)	
Agriculture	391.8	58.3	271.2	59.6
Mining	68.6	10.3	69.8	15.3
Manufacturing	79.9	11.9	61.9	13.6
Electricity and water	9.1	1.4	4.5	1.0
Transport and telecommunications	57.4	8.5	47.5	10.5
Finance	17.0	2.5	...	...
Other services	47.8	7.1	...	...
Total	671.6	100	454.9[b/]	100

Source: Conjoncture Economique.

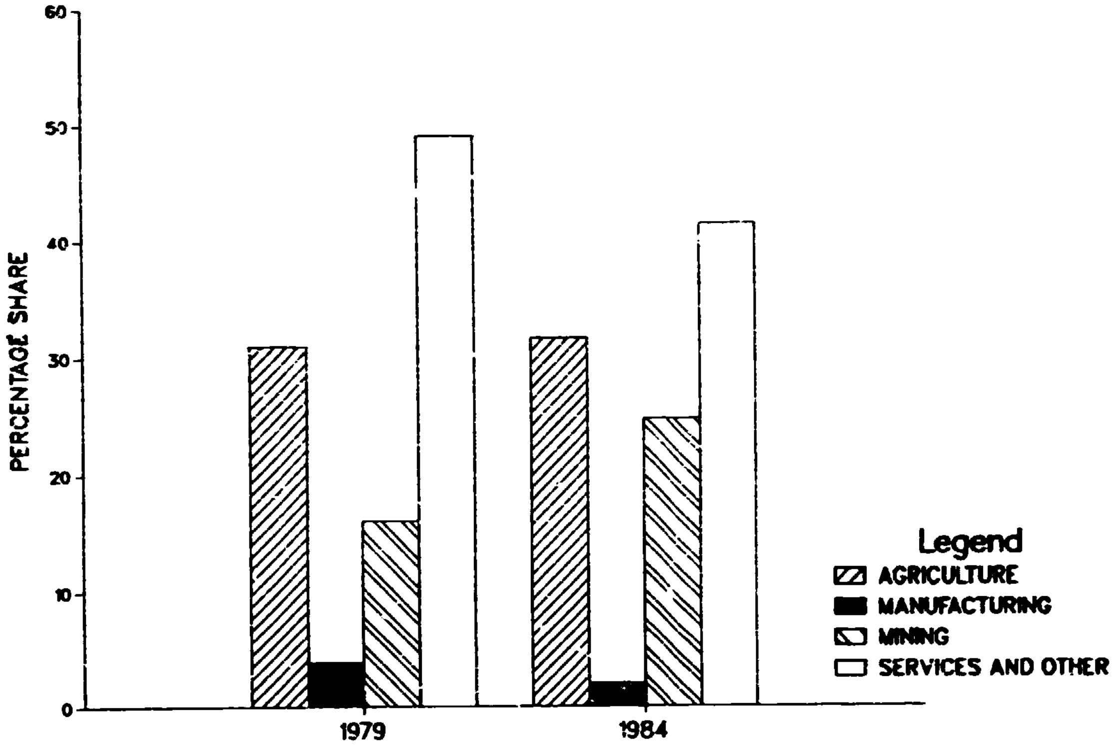
a/ Based on surveys of major enterprises.
b/ Excluding finance and other services.

Ownership of the larger companies in the sector is largely concentrated in the hands of foreign residents and multinational companies. The Government is in the process of revising the 1969 Investment Code and has established an office to attract investment in the Inga Industrial Free Zone (ZOFI) with cheap power from the Inga hydroelectricity complex and tax concessions. The State Development Bank SOFIDE is an important vehicle in the provision of finance for investment in the sector and pays close attention to the special requirements of SSIs (Small-Scale Industries).

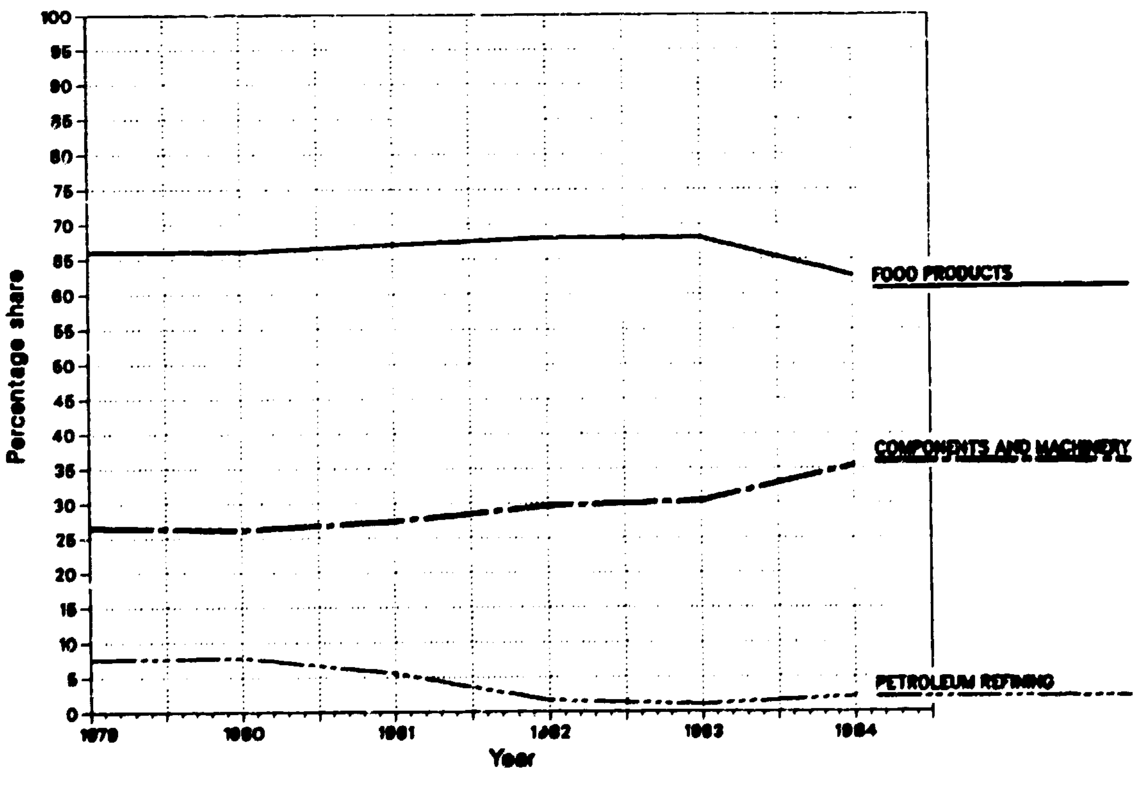
Manufacturing currently generates little foreign exchange. Its exports are on a very low level. At the same time, it is common for companies to import semi-finished goods and undertake only basic assembly functions or semi-processing in Zaire: the pharmaceutical sub-sector is a good example. The Government has frequently stressed the need of foreign currency savings. It has urged manufacturing companies to use domestically available rather than imported inputs, and to increase the processing of local resources.

MANUFACTURING TRENDS

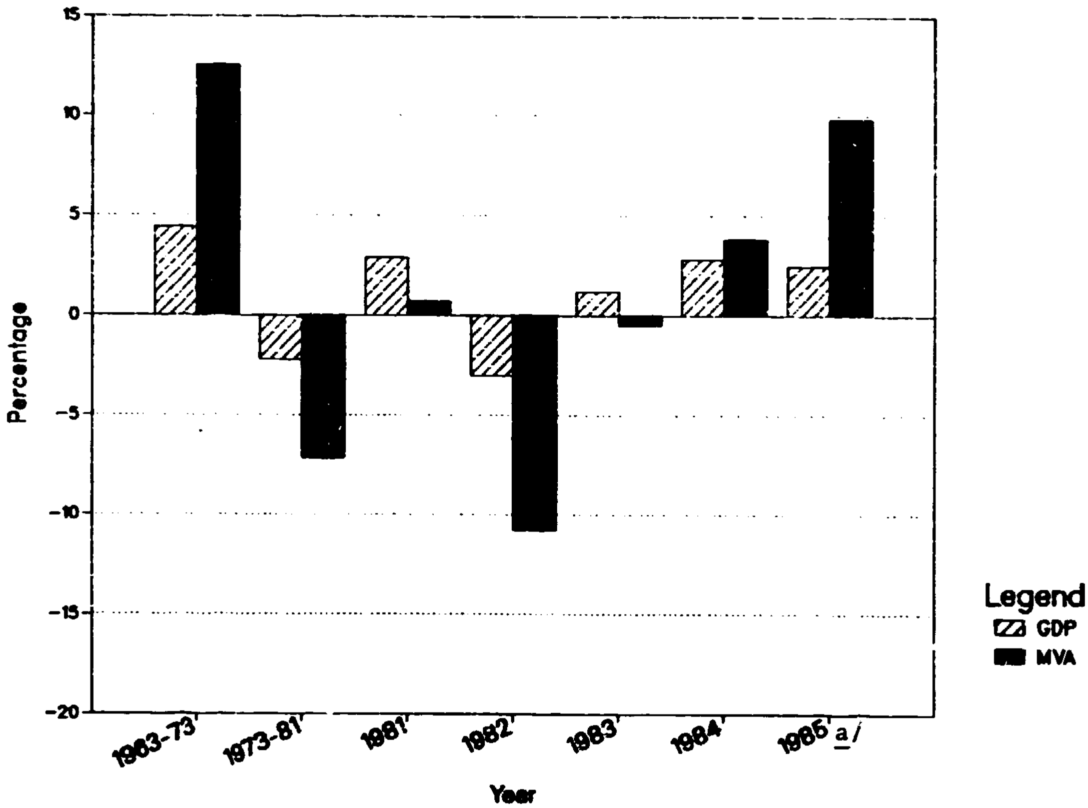
DISTRIBUTION OF GDP BY SECTOR OF ORIGIN, 1979 AND 1984



COMPOSITION OF MVA, SELECTED SUB-SECTORS, 1979-1984
(in current prices)

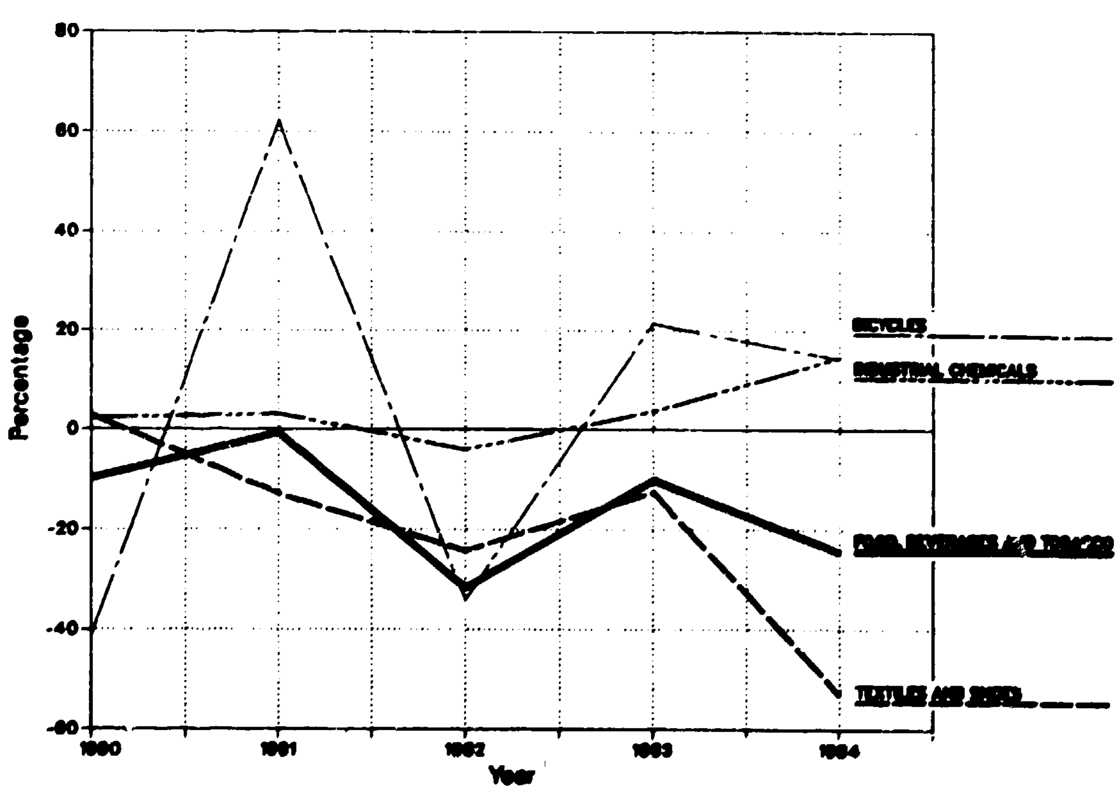


ANNUAL GROWTH RATES OF GDP AND MVA, 1963-1985
(real growth rates)

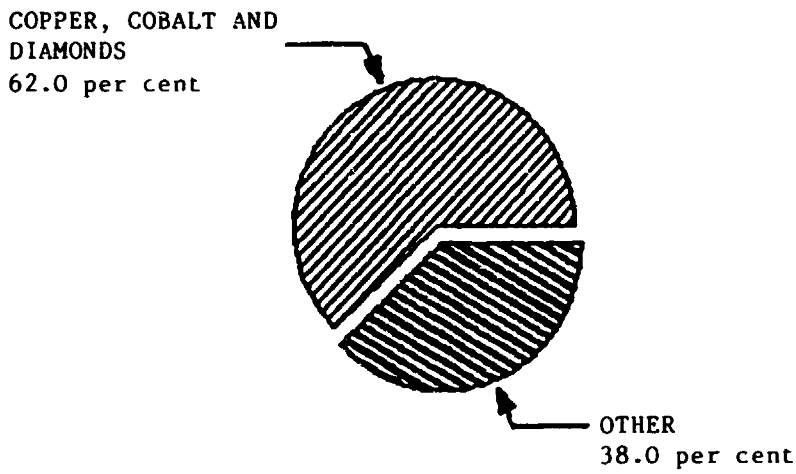


a/ MVA growth rate during the first half of 1985.

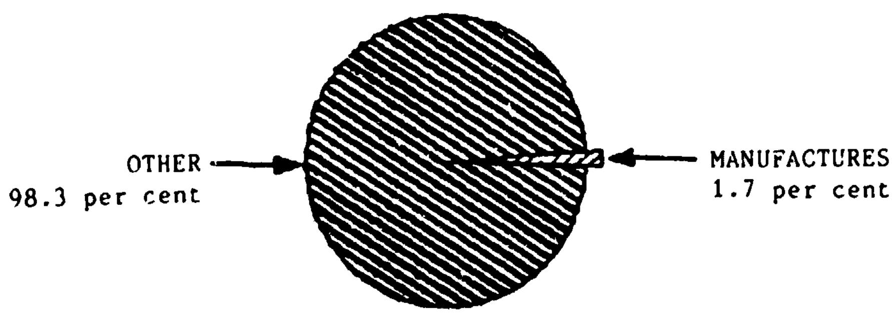
ANNUAL GROWTH RATES OF INDUSTRIAL OUTPUT, SELECTED INDUSTRIAL PRODUCTS, 1980-1984



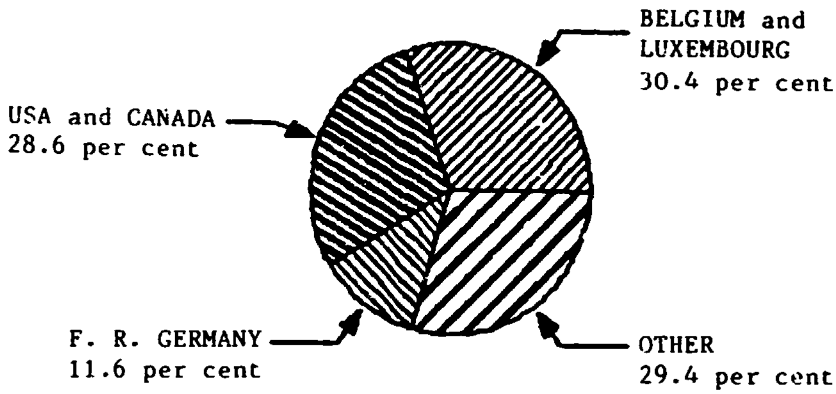
SHARE OF COPPER, COBALT AND DIAMONDS IN EXPORTS, 1984



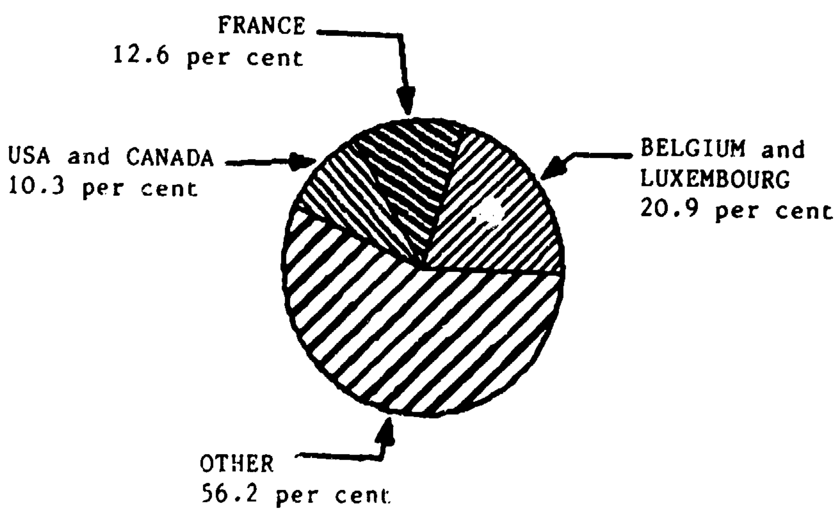
SHARE OF MANUFACTURED EXPORTS IN TOTAL EXPORTS, 1984



MAIN DESTINATIONS OF EXPORTS, 1984



MAIN ORIGINS OF IMPORTS, 1984



2. STRUCTURE AND PERFORMANCE OF THE MANUFACTURING SECTOR

2.1 Growth and structural change

The performance of MVA relative to GDP is highlighted in Table 4. Measured in current prices, its share of the total fell steadily from 3.8 per cent in 1979 to 1.5 per cent in 1983, although it did recover to 2.0 per cent in 1984. BZ estimates of real sectoral growth show a rise of 3.8 per cent in 1984 after a marked fall of 10.8 per cent in 1982. Provisional statistics from the Department of Information have suggested an annual growth rate of 9.8 per cent in manufacturing in the first half of 1985. BZ data show the importance of the consumer goods industries which accounted for 62.6 per cent of MVA in 1984. The contribution of the components and machinery industries amounted to 35.3 per cent and that of petroleum refining was limited to 2.1 per cent as a result of protracted production difficulties at the plant.

Table 4. Composition of manufacturing value added, 1979-84
(Z millions at current prices)

	1979	1980	1981	1982	1983	1984	1984 (per cent)
Consumer goods	277.1	343.3	434.9	489.3	607.1	1,222.3	62.6
Components and machinery	111.0	135.3	177.0	210.4	267.1	690.2	35.3
Petroleum refining	31.1	39.9	36.1	11.4	8.1	40.7	2.1
Total	419.2	518.5	648.0	711.1	882.3	1,953.2	100.0
MVA/GDP (per cent)	3.8	3.1	2.7	2.3	1.5	2.0	
Real MVA growth (per cent)		-1.2	0.7	-10.8	-0.5	3.8	

Source: Banque du Zaire.

In the light of an average annual decline in MVA of 7.2 per cent in 1973-81, Appendix Table A-1 demonstrates that the deterioration in performance has been widespread throughout the manufacturing sector and particularly marked in the consumer goods industries. Value added decreased by more than 10 per cent annually in beverages, leather products and footwear. Significant real growth was only achieved in iron and steel, which may be explained by the start-up, albeit on a limited scale, of the Maluku metallurgical plant outside Kinshasa in this period.

The importance of the consumer goods industries, reflected at current prices in Table 4, is confirmed in Appendix Table A-2, which illustrates the composition of MVA in 1975 prices in 1973-80. Beverages, food products and tobacco together accounted for 41.7 per cent of MVA in 1973 and 39.5 per cent in 1980. A second clue to the structural nature of the sector is provided by the low level of processing of Zaire's natural resources. Rubber and wood products, and furniture constitute a negligible contribution to value added in spite of substantial resources. The share of textiles has increased from 5.1 to 6.3 per cent but some of the companies in the sub-sector work with imported cloth. Petroleum refining has decreased in importance since the Sozir plant, a joint Zairian-Italian venture, was not built for the treatment of the heavy Zairian crude oil and has been running at less than 20 per cent capacity. A third indicator of the nature of manufacturing is to be found in the low level of MVA in capital goods industries. Iron and steel, machinery and transport equipment provided 10.5 per cent of total value added in 1980 after 5.5 per cent in 1973. However, in the light of the sharp fall of MVA in the period, the contribution of the three sub-sectors only rose in constant prices from $35 million to $40 million.

2.2 Performance and efficiency

Data on the production of principal manufactures up to 1984 is shown in Table 5 and permits an examination of the sector since the period covered in Appendix Table A-2. The food, drink and tobacco industries have experienced mixed fortunes. Maize flour production, which is dominated by Gécamines-Développement, a branch of the mining company, has fallen each year since 1979, partly because maize growers are unable to compete effectively with their subsidized counterparts in neighbouring Zambia. By contrast, the sugar industry has started to benefit from substantial investments in two companies. Production at the Compagnie Sucrière de Kwilu-Ngongo in Bas Zaire is expected to rise from 50,000 to 65,000 tons in 1990 and at the Sucrerie de

Table 5. Production of principal manufactures, 1979-84
(tons unless otherwise stated)

	1979	1980	1981	1982	1983	1984
Food, drink and tobacco						
Maize flour	189,000	170,534	169,235	115,522	103,865	78,291
Sugar	50,130	47,680	47,235	51,544	51,519	57,507
Animal feedstuffs	16,480	20,925	22,922	17,406	26,549	...
Beer ('000 hl)	2,980	2,628	2,760	2,940	3,053	3,699
Cigarettes (millions)	2,887	2,739	2,810	3,278	3,472	3,475
Soft drinks ('000 hl)	450	590	725	781	1,155	828
Textiles and shoes						
Cotton fabrics ('000 sq.m)	59,670	61,370	53,397	40,404	35,313	28,000
Printed fabrics ('000 sq.m)	49,002	53,250	47,720	38,749	46,403	51,820
Shoes ('000 pairs)	4,158	2,711	2,477	2,290	2,030	2,556
Timber industries						
Sawn wood (cu.m)	7,389	12,333	22,655	15,535	12,875	13,117
Plywood (cu. m)	17,752	12,409	7,889	8,102	14,386	19,185
Matches ('000 cases)	110	101	109	109	104	127
Transport equipment						
Bicycles (units)	16,128	9,422	15,283	10,079	12,233	13,970
Lorries (units)	1,316	1,012	1,030	1,075	1,994	2,335
Non-metallic minerals						
Cement ('000 tons)	421	453	473	539	517	505
Bottles ('000)	14,140	15,438	17,614	20,466	25,466	19,200
Industrial chemicals						
Soap	30,311	30,965	31,895	30,589	31,681	36,315
Paints	4,030	3,10?	3,044	3,334	2,664	3,414
Explosives	3,468	4,881	4,518	5,638	8,850	8,168

Source: Banque du Zaire.

Kiliba in Kivu from 8,000 to 25,000 tons in the same period with an ADB-led $23 million loan. Total output is projected as rising to 105,000 tons by 1990 from the current level of 57,500 tons. This would create an important foreign exchange saving: sugar imports in 1984 have been estimated at 25,000 tons. In the case of breweries, sluggish performance in the past has been caused not by restricted capacity, which currently stands at 6.3 million hl, but by the apparent weakness in demand in the domestic market although production in the first half of 1985 rose to 2.0 million hl.

Restrained demand is equally a limiting factor in the development of the cement industry. Output of 505,000 tons in 1984 and 238,000 tons in the first half of 1985 fell far short of the annual capacity of 895,000 tons. The bottling industry has increased production steadily since 1979. (Lower output in 1984 is explained by the closure of the plant of the main producer, Boukin, for four months for the installation of new equipment with increased capacity, financed by a loan from the State Development Bank SOFIDE.) Production reached 13.3 million units in the first half of 1985 and the company hopes to export to subregional markets. The current level of export and sales taxes is such that the company cannot undercut European imports.

The overall impact of the recovery programme on the manufacturing sector has been a squeeze on domestic demand. Reduced government expenditure in real terms, salary and wages restraint in the public sector, the continuing imposition of credit ceilings on commercial banks and tighter fiscal and monetary policy have combined to contain demand. The determination of the Government to reduce subsidies to the public sector led to the introduction of substantially higher tariffs by the railway, water and electricity companies after the September 1983 devaluation and flotation of the currency. This has had the desired effect on budget spending but the productive sector has generally been unable to raise its prices to reflect the higher operating costs on account of restrained demand. Although data on industrial productivity is unavailable, it is safe to assume that capacity underutilization is a major problem in the manufacturing sector. The 1986-90 Plan has set the target of average annual growth of 4.0 per cent for the economy and 8 per cent for the industrial sector, with the aim of achieving a growth rate well above projected demographic trends and, therefore, a rise in living standards and purchasing power.

The currency adjustment of 1983 and the subsequent depreciation of the Zaire (roughly 80 per cent in relation to the dollar in thirty months) has increased import costs and customs dues. Importers are obliged to deposit with their bankers funds to cover their imports as soon as they receive an allocation of foreign exchange. These funds remain "idle" with the banks until the importer takes delivery of the goods, a period of up to six months, which creates an additional strain on already fragile corporate liquidity. However, the flotation has benefited the small number of exporting companies in the sector and the potential foreign investor, who both now receive realistic returns on their foreign currency sales. There is also evidence that foreign exchange has become more available as a result of the stronger export performance since 1983. Total exports rose by 8.6 per cent in 1985 and yielded an estimated trade surplus of $646 million.

2.3 Exports and imports of manufactures

As noted above, manufactured exports represent a very small percentage of total exports. Appendix A-3 shows that manufactured exports (SITC 5-8 less 68) fell from $66.6 million in 1973 to $46.3 million in 1978, which meant a decrease in the percentage of the total from 6.7 to 5.2 per cent. BZ statistics confirm a continuation of this picture. Manufactures yielded only 1.7 per cent of the total export earnings in 1984. Copper, cobalt and diamonds provided 62 per cent of export revenue in 1984, crude oil 18 per cent and coffee 12 per cent. Export earnings from diamonds fell by 10 per cent in 1985 although the volume was up by 4 per cent. Exports of palm oil, cocoa, rubber, zinc and gold accounted for the greater part of the small balance. Table 6 presents the volumes of agro-industrial exports during 1977-84.

Table 6. Agro-industrial exports, 1977-84

(in tonnes)

Products	1977	1978	1979	1980	1981	1982	1983	1984 a/
1 Palm oil	21,495	9,647	...	10,007	6,154	4,169	2,476	6,386
2 Palm kernel oil	15,038	17,200	17,595	18,734	18,948	13,374	15,177	13,221
3 Palm cake	26,037	22,623	18,145	24,208	30,710	21,478	17,254	19,411
4 Robusta coffee	55,932	71,646	55.039	67,717	59,043	59,938	55,488	60,452
5 Arabica coffee exports	8,180	10,202	7,760	6,406	8,602	8,066	7,866	8,893
6 Logs	59,231	43,186	48,227	66,064	66,439	73,036	76,092	94,191
7 Sawn timber	29,376	30,690	28,600	21,829	19,680	22,339	18,184	27,142
8 Rubber	27,622	26,083	17,888	19,472	18,509	14,927	13,014	14,607

Source: Bank of Zaire.

a/ Provisional.

BZ data has shown revenue from cement at SDR 13.5 million, from chemicals at SDR 3.3 million and from other manufactures at SDR 14.9 million. Cement exports reached a record high of 168,000 tons in 1984 of which 128,000 tons were dispatched to just one market, the Congo. However, this source of foreign currency is set to fall at least in the short term as new cement plants in the Congo become operational towards the end of the 1980s. Government economists are aware of the largely untapped potential that lies in the processing of Zairian natural resources, such as rubber, timber, cotton and vegetable oils.

Machinery and equipment predominated the import structure in the 1970s. The country imports both finished and semi-finished manufactures. BZ statistics, which are not wholly comparable since they rely on a different categorization of traded goods, point to a sharp fall in the import of machinery and equipment to only 11.3 per cent of the total in 1984. The improved export performance is unlikely to produce substantially higher volumes of foreign currency for imports because of the rising burden of debt service, which exceeded 30 per cent of merchandise exports in 1985, inclusive of IMF fees and commercial arrears. Repayments are likely to remain at this high level for the rest of the decade.

The revised new investment code (some details were announced in April 1986) seems to have made substantial changes in import duties. These include removal of import taxes and reduction to 3 per cent of import duty on raw materials and semi-finished products needed by Zairian industry, as well as reduction to 3 per cent of import duty on spare parts for vehicles, machinery and industrial equipment.

The principal destination of Zairian exports is the EEC. Belgium is the main market on account of historic and investment ties. The more promising opportunities for an expansion of manufacturing exports appear to lie in the more important sub-regional markets, notably Zambia, Tanzania and the Congo. This would require major investment in the infrastructure, particularly roads and railways. The EEC is the leading supplier, providing 70 per cent of the chemicals and 66 per cent of the transport and machinery imported.

As for the level of processing, the largest category of exports in 1978 was processed goods for further processing, 53.5 per cent, compared to 81.2 per cent in 1970 (Appendix Table A-6). At the same time, non-processed goods for further processing accounted for 43.1 per cent in 1978 compared with 17.8 per cent in 1970. It apparently reflects low levels of investment in manufacturing. This also highlights again the scope for increased processing of Zaire's natural resources. As for imports, processed goods for final use represented 75.6 per cent of the total in 1970 and 73.4 per cent in 1978. A comparison of these figures with figures pertaining to the exports of non-processed and processed goods for further processing and final use shows the country's potential for import substitution through the expansion of the manufacturing sector. Import substitution is a key objective of industrial development policy in the 1986-90 Plan.

2.4 Ownership and investment patterns

The turnover of the twenty leading industrial companies in 1984 is shown in Appendix B. The first point that emerges is the role of the State. For strategic reasons the Government does not wish to sell equity in Gécamines. However, the overall degree of state ownership is falling. Since the abolition of its monopoly in June 1985, Petrozaire, the third largest company in 1984, has played a decreasing role and its functions have largely been assumed by the local subsidiaries of the oil multinationals. The Government is currently seeking foreign equity participation in the maritime shipping company, CMZ. The recovery programme involves a reduced level of state intervention in the management of public sector companies and a foreign airline has recently secured the management contract for Air Zaire. There is a high level of foreign ownership. Chevron, the Société Générale de Belgique, Heineken, Unilever, Continental Grain of New York, Petrofina and Shell have substantial capital interests in the leading companies. Foreign nationals, resident in Zaire, are also represented, notably in Groupe Hasson et Frères. The high level of foreign investment and the limited degree of state equity in industry are especially pronounced in the manufacturing sector. Appendix B also shows the low weighting of the manufacturing sector. It has seven manufacturing companies in the leading twenty, with the highest, Bralima, the eighth largest. Three are breweries, two are textile companies, one mills flour and one manufactures cigarettes. This shows the domination of the food, drink and tobacco industries in manufacturing.

As a percentage of expenditure on GDP at current prices, gross fixed capital formation rose from 13.7 per cent in 1979 to 16.0 per cent in 1983 and 20.9 per cent in 1984. This development is a welcome trend in view of the aims of the recovery programme and is matched by a corresponding decrease in the percentage share of public sector consumption. The current Plan assumes that net private sector investment is now running at a level of about $150 million annually and considers higher volumes of investment as a priority. The Government has had negotiations with a number of parties on project development in ZOFI, notably with the Alusuisse consortium over a proposed $1.0 billion aluminium processing plant, but has not yet secured a firm commitment. Belgian private investment in Zaire is estimated at $850 million, US at $250 million and British at $60 million.

2.5 Manufacturing activity by size and geographical distribution

There is no official statistical information on the size of manufacturing enterprises in Zaire. The estimate of 61,900 employees in the sector in 1983 covers only major enterprises. The leading manufacturing company in 1984 in terms of turnover, Bralima (Appendix B), had a work force of about 3,300 persons at the end of 1984. An indication of the importance of SSIs (Small-Scale Industries) is provided in the 1986-90 Plan: it quotes a BZ survey of 1984 that suggested a total of 140,000 small businesses in Kinshasa and 24,000 in Lubumbashi. This would show that SSIs offer more employment than the larger enterprises. The overwhelming majority would be family businesses with less than five employees. The SSIs are not divided sectorally but they are by no means all in the manufacturing sector: indeed, most are probably in the distribution, commerce and leisure sectors.

Geographical distribution of the sector has historically been determined by the marked degree of centralization in government policy. Important decisions have invariably been referred to Kinshasa, whether a Department is involved or SOFIDE. Those manufacturing enterprises that responded to the 1969 Investment Code were all established in the capital and Bas Zaire with the exception of one textile company in Kisangani in Haut Zaire. When, in the early 1970s, the Government adopted the role of centralized planner, major public sector projects were all proposed for the same regions: the best examples are the Inga hydroelectricity complex, the Maluku metallurgical plant and the Sozir oil refinery, all of which are located in Bas Zaire.

Although the Government has now opted for withdrawing from the central role in the manufacturing sector as a policy decision, seen most clearly in the denationalization of most of the companies in the sector that were earlier Zairianized, there are several reasons why the concentration of sectoral resources is likely to remain in Kinshasa, Bas Zaire and Shaba. These regions offer good access to graduates and semi-skilled labour for employment. They have received priority in the allocation of management resources by the Government, by the services sector and by the commercial banks. They are the best served regions for the provision of their energy and transport requirements. They have the highest personal disposable income in the country and offer thus the best market opportunities. The Plan emphasizes the need for decentralization and envisages public sector investments that will encourage the regional diversification of manufacturing activity. The consumer goods industries, such as the breweries which already have an intra-regional presence, will most likely be the first to respond to this initiative.

2.6 Recent developments and prospects

Zairian manufacturing development has reached a turning point. After a steady reduction in value added in real terms in 1973-83, there was a noticeable improvement in 1984 and early 1985, with MVA growing at 3.8 and 9.8 per cent respectively. It is unclear whether this will be maintained. The recovery programme has led to depressed demand for sectoral output and, consequently, strained corporate liquidity. There is evidence that many enterprises in the sector have undergone programmes of rationalization, fixed asset renewal and modernization in the past three years. This will have put them in a good position for responding to the recovery of demand. The Plan for 1986-90 sets an average annual growth rate of 8 per cent for the industrial sector. The framework and objectives of the Plan give indications of a "structural adjustment process" and a master plan for industrialization.

Export industries in the sector remain marginal although there are opportunities in the important subregional markets. In a markedly open economy and with the recent liberalization of import regulations, the sector is exposed to considerable pressure to earn its required foreign currency. An improved trading performance has increased these prospects but a continuing burden of substantial debt service, even allowing for regular reschedulings of the external debt, is likely to mean that the volume of foreign exchange for importers and industrial entrepreneurs will not dramatically improve.

For budgetary reasons, quite apart from policy considerations, the Government has almost no capital role to play in the sector. Its efforts are concentrated on planning, which will be examined in the following Section, and on attracting new investment. In the latter objective it has had only limited success to date. However, there has been no shortage of enquiries and visiting delegations from prospective investors and the Government is confident that these will materialize into firm commitments once the benefits of the recovery programme become increasingly clear.

3. INDUSTRIAL DEVELOPMENT STRATEGIES AND INSTITUTIONS

3.1 Industrial development strategies

As already noted, a principal aim of the 1986-90 Plan is the attainment of an annual average of 4.0 per cent economic growth and 8 per cent industrial growth. This would comfortably exceed the projected rate of population growth of 2.3-3.0 per cent up to the year 2000 and create a steady real increase in living standards. The Department of Planning demonstrates that prices have consistently risen at a higher rate than wages over the past decade: it refers to a BZ survey which shows, using a base of 100 in 1975, that the retail price index stood at 4,730.9 at the end of 1983, the private sector salary index at 1,601.3 and the public sector salary index at 684.5. Any calculation of the rate of inflation in a country of the size and regional variations of Zaire will necessarily be contested, but it is clear that purchasing power has fallen sharply in the past decade. Against this background the Government has attached considerable importance to anti-inflationary policies and has chosen to use monetary, budgetary and fiscal means to this end.

The public sector investment programme has been highlighted in Table 2. The State is to provide Z20 billion or 12 per cent of the total from its budget allocations towards the programme. This is consistent with the commitment of the Government to maintain control over public spending, which is monitored in the context of IMF performance criteria. The Plan projects a constant reduction in the budget deficit from Z2.7 billion in 1985 to Z1.0 billion in 1988 (at 1985 prices) and balanced budgets thereafter. The relatively low level of budgetary support is matched by the projection of external finance amounting to Z92.7 billion or almost 56 per cent of the total. The Government has already received firm commitments in loan or grant form for about 60 per cent under bilateral and multilateral agreements.

A substantially higher level of public capital inflows would transform the balance of payments position. The merchandise trade surplus increased sharply from $329 million in 1982 to $646 million in 1985. The reduction in the current account deficit from $369 million to $229 million during 1982-84 was less marked because of substantially higher interest repayments on the external debt. Statistics from OGEDEP, the Zairian debt management agency, have shown that the "London Club" of commercial bank c... ors and the three principal bilateral partners of Zaire together disbursed in new facilities $110 million less than they received in debt repayments in 1984. This situation appears to have prevailed in 1985. However, the projections of external finance for the public sector investment programme in the Plan would reverse this outflow. An improved trading performance and higher capital inflows would transform the overall balance-of-payments deficit before rescheduling from $361 million in 1985 to $88 million in 1990. Given that the Government has persevered with the recovery programme, that the IMF has sanctioned two new standby facilities since 1983 and that the "Paris Club" of OECD member countries has twice rescheduled Zairian repayments in the same period, it seems likely that the Plan's projected balance of payments deficits can be covered by further reschedulings.

Spending on the infrastructure in the Plan is shown at Z89.7 billion or more than 54 per cent of the total. Investment in the transport sector alone is set at Z57.7 billion. This priority addresses an urgent need of which the Plan provides numerous examples. In 1984 Gécamines was only able to export 303,000 tons by the "Voie Nationale" (a rail and river route from Shaba to the Atlantic port of Matadi) out of a total mineral tonnage of 544,000 tons due to bottlenecks in the domestic transport network. As a result the company had to make extensive use of the southern route from Shaba although the "Voie Nationale" offered a price advantage of the equivalent of $30 per ton and the opportunity of settling accounts in local currency. It is not merely the mining sector that would benefit from the planned public sector investment programme in the infrastructure. The output of the agriculturally rich Kivu region would be more easily transported to the major urban markets, notably Kinshasa. Further, the manufacturing sector would be better placed to develop on a regional basis. The Government's policy of encouraging the decentralization of economic activity should be served by the proposed improvements in the infrastructure.

In line with its policy of economic liberalism and a virtual withdrawal from a capital role in industrial development, the Government has left investment in industry to the private sector. As seen in Section 2.4, ownership of the manufacturing sector is heavily concentrated in the private sector. On the basis of a survey of potential investors, commercial banks and already established companies, the Department of Planning has projected private sector investment in 1986-90 at Z95 billion (at 1985 prices). Investment in manufacturing is set at Z32 billion, in energy at Z17 billion and in commercial agriculture at Z15 billion. On a regional basis, the Plan foresees investment in Bas Zaire at Z32 billion, consisting principally of Z12 billion by the oil consortia and Z10 billion in ZOFI, of Z20 billion in Kinshasa and of Z13 billion in Equateur. In terms of financing, the Plan projects external sources at Z53 billion and domestic investment at Z42 billion.

While the capital role of the State in industrial development is negligible, the Plan has integrated targets and policies for both the public and private sectors. Real growth in demand would result from average annual growth of 4.0 per cent and would be spread more evenly throughout the country as a result of spending on infrastructure. An extended period of stability in prices and money supply would improve further the investment climate. The 1969 Investment Code is currently being rewritten to improve investor incentives and the Government is pressing for investment in ZOFI.

Some details of the new package of incentives being offered to foreign firms under the new investment code were revealed in April 1986:[1/]

> Foreign companies will be eligible for incentives if they contribute to job creation or use of local natural resources. Eligible firms will be exempt from the employer's contribution to tax paid by general-category employees, and from part of the income tax levied on expatriate staff, if such staff are responsible for training Zairean personnel.
>
> Eligible firms will be exempt from tax on foreign raw materials and semi-finished products and, in certain circumstances, from all import duties and taxes. Local factories supplying eligible foreign firms with equipment will be exempt from indirect taxes.
>
> In addition to the changes in the investment code, substantial changes have been made in import and export duties and taxes.

1/ *African Economic Digest*, 19 April 1986, p. 14.

3.2 Industrial development institutions

The Department of Planning is the central instrument of industrial development strategy. It co-ordinates and monitors the other government agencies in this field. The Conseil National de Planification and the Conseils Régionaux de Planification (National and Regional Planning Councils) were created in 1985 to assist the Department of Planning in the administration and promotion of its strategies. In addition, every Department and public enterprise now has a planning cell with the same function. The Plan calls for a greater allocation of human and financial resources to statistical bodies. The Institut National de la Statistique (National Statistical Institute) has already been strengthened. Three industrial promotion agencies also report to the Department of Planning, the ZOFI office, the Investment Commission and OPEZ, a body established in 1973 for the encouragement of Zairian enterprise.

The Plan has identified the employment and production potential of SSIs. The employers' organization ANEZA has its own PME (Petites et Moyennes Entreprises) section which provides technical and management assistance to small- and medium-sized businesses. As already noted in Section 2.5, the Plan suggests that the SSIs, which may roughly be classified as PMEs, have created more employment than the larger enterprises.

The Plan calls for a strengthening of public sector management. At the end of 1984, there were a total of 378,000 Government employees, consisting principally of 103,000 in central government, 178,000 in primary and secondary education and 76,000 in FAZ (the Zairian Armed Forces). Their remuneration absorbed 25 per cent of the total budget in 1984. Employment in central government is set to rise by 10,700 by 1990 without an overall increase in Government employees. The Government is keenly aware of the impact of the fall of the real value of public sector salaries on productivity and will keep pay increases at least at the level of inflation. In the medium term, it intends to establish training schools for senior officials in central government.

SOFIDE, the state development bank, is one of two important financial vehicles in industrial development. In the light of the recovery programme, SOFIDE has realigned its own priorities to concentrate on the needs of exporting and import substitution industries, and on SSIs. In 1984 its capital was increased from Z12 to Z260 million and it also negotiated additional credit lines from IDA and EIB. SOFIDE capital is owned by the Government, local institutions and foreign development banks. Its lending resources are predominantly in foreign currency which explains why only 3 per cent of its loan disbursements in 1984 were allocated to working capital finance, as compared to 74 per cent for modernization programmes and 23 per cent for new projects. Of total loans of Z945 million in 1984, the manufacturing sector received the third highest share at Z152 million (16.1 per cent of the total) after commercial agriculture and forestry at Z475 million (50.2 per cent) and transport at Z282 million (29.9 per cent).

On a regional basis, 43 per cent of loan funds in 1984 were allocated to Kinshasa, 22 per cent to Bandundu and 13 per cent to Equateur. In view of the high proportion of sanctioned loans in 1984 to modernization projects, it is not surprising that the capital, already a centre of manufacturing activity, benefited most from new SOFIDE facilities. SSIs received Z512 million or 54 per cent of the total in 1984.

The second financial vehicle in development planning is the Fonds des Conventions de Développement (FCD), funded by the levy of a retail sales tax. The FCD has four principal objectives; the encouragement of internal output so as to reduce the dependence of Zairian businesses on external markets, the promotion of rural production so as to raise purchasing power in the interior, the integration of industry and agriculture with a higher level of processing of domestic natural resources and the improvement of training facilities for Zairian managers. The FCD approved loans totalling Z1,000 million in 1984, of which Z379 million was allocated to agro-industry and Z307 million to industry.

4. RESOURCES FOR INDUSTRIAL DEVELOPMENT

4.1 Human resources

The provisional results of the July 1984 national census have shown a population of 29.7 million inhabitants. Regional distribution of the population is indicated in Table 7. Kinshasa alone has almost 9 per cent of the national population, a proportion that rises and will continue to rise with the exodus from the rural areas to the cities in the search for formal employment until the benefits from the Government policy of encouraging the growth of economic activity and employment in the interior become clear. Only two other cities, Lubumbashi in Shaba and Mbuji-Mayi in Kasai Oriental, account for more than one per cent of the population. The census showed a foreign population of 630,000 persons. The average density of Zaire is 13 inhabitants per square kilometre, with Kinshasa the highest and Shaba the lowest at 266 and 8 respectively. The second and third most densely populated regions are Bas Zaire and Kivu with 36 and 20 inhabitants per square kilometre, both regions with important labour-intensive agricultural sectors.

Table 7. Regions, regional capitals and population in 1984

Region	Population ('000)	Capital	Population ('000)
Kinshasa	2,654		
Shaba	3,874	Lubumbashi	543
Kivu	5,188	Bukavu	171
Haut Zaire	4,206	Kisangani	283
Bandundu	3,682	Bandundu	63
Equateur	3,406	Mbandaka	125
Kasai Oriental	2,402	Mbuji-Mayi	423
Kasai Occidental	2,287	Kananga	291
Bas Zaire	1,972	Matadi	145
Total	29,671		

Source: Department of Planning.

The census is accompanied by two projections of population growth to 1990. The first is founded on historic growth in the subregions since the last census in July 1970 and arrives at a figure of 34.5 million in 1990, based on an annual compound growth rate of 2.3 per cent. The second, higher projection assumes an annual compound growth rate of 3.0 per cent and reaches a total of 36.1 million in 1990. Demographic trends are now assessed and analysed by Conacop, the national population commission. In either event, the rate of growth can only increase the pressure on employment and agricultural yields.

The labour force, covering all between the ages of 15 and 59, was shown at 14.5 million in the 1984 census, consisting of 62 per cent rural and 38 per cent urban. On the basis of Plan estimates of employment in the money economy (Section 2.5), employment in the formal sector stands at roughly 1.6 million or 11 per cent of the labour force. However, this ignores the substantial and markedly labour-intensive subsistence sector. There is, nonetheless, labour available for an expansion of the industrial sector.

National statistics have shown that 90 per cent of the relevant age groups were at primary school and 23 per cent receiving secondary education in 1981, and that 1 per cent of those of university age were benefiting from higher education. The Department of Higher Education has stressed the importance of the human resources of the universities and polytechnics matching the requirements of industry and commerce. Historically, the system has been heavily orientated towards the arts but an emphasis on vocational training is an objective of the Plan.

4.2 Natural resources

Zaire is blessed with an abundance of natural resources, both mineral and agricultural. The Copper Belt that straddles the Zairian-Zambian border is the sixth largest copper producing region of the world. In addition, Zaire is the leading world producer of cobalt and industrial diamonds. There are also deposits of zinc, manganese, cadmium, gold and uranium. The mineral wealth is concentrated in Shaba, with the exception of diamonds which are mined and collected from alluvial sources in Kasai Oriental and Occidental. Gécamines is the dominant force in the mining sector, producing more than 90 per cent of the copper and all the cobalt and zinc. The sector is export-orientated; domestic consumption of refined copper in 1984 amounted to only 3,300 tons out of refined copper output of 225,000 tons.

Mineral production is indicated in Table 8. Marketing and mine extraction considerations are such that production levels are unlikely to rise significantly in the medium term. Gécamines is close to securing co-finance from the World Bank, the EEC and other multilateral institutions for a $850 million investment programme (at 1985 prices). The aim of the programme is not to boost production but to rehabilitate ageing machinery, improve productivity and raise copper refining capacity. World cobalt consumption is currently broadly stable and Gécamines, which accounts for about 60 per cent of global output, is unwilling to raise sales and thus threaten price levels.

Table 8. Production of principal minerals, 1980-85

('000 tons unless otherwise stated)

	1980	1981	1982	1983	1984	1985 a/
Copper (ores/concentrates)	459.3	504.8	502.7	502.3	500.4	229.5
Zinc concentrates	122.8	121.2	147.2	133.2	131.7	56.0
Cobalt	14.5	11.2	5.6	5.4	9.1	5.7
Gold ('000 kg)	1.1	2.0	1.6	5.6	3.5	1.1
Diamonds (million carats)	10.2	6.8	6.1	12.0	18.5	8.2
Coal	139.5	129.4	113.7	109.4	104.3	51.3

Source: Department of Mining and Energy.

a/ January-June only.

The mining of diamonds has virtually reached a plateau in Zaire and will not register important growth in volume without substantial investment. Although mineral production trends thus appear flat, investment opportunities in smaller scale enterprises, such as alluvial diamonds and rare metals, have become markedly more attractive since the 1983 currency flotation. Production and price developments are crucial to the Zairian export performance, balance of payments position and debt service capacity. The scale and nature of the manufacturing sector is such that it has minimal capacity for the processing of Zairian minerals.

Zaire is a country of great agricultural potential, with climatic and soil conditions suitable for growing a wide range of tropical crops, including palm oil and kernels, rubber, coffee, cocoa and sugar cane. Farming is carried out by small-scale subsistence and semi-subsistence producers and on large plantations, some of them owned by foreign companies. The sector, including forestry, is important for its export earnings, for its potential in making Zaire self-sufficient in basic foodstuffs and for the possibility of increasing value added by greater processing of its resources.

Production of the main cash crops is shown in Table 9. Output of palm products has fallen over the 1980-84 period. However, the leading producer has completed a $32 million investment programme, financed from internal sources and with support from the World Bank and the ADB, and expects to raise its own production of palm oil to 70,000 tons annually by the mid-1990s. Coffee is the only substantial agricultural export, accounting for 12 per cent of export earnings in 1984. Over 90 per cent of the robusta harvest and all the arabica crop, which commands a premium in the markets, are exported. Small farmers grow most of the Zairian coffee which is purchased from them and exported by Zairian and foreign entrepreneurs. With the scrapping of ICO export quotas in February 1986 on account of the Brazilian drought, the industry has the opportunity to dispatch accumulated stocks and to boost export tonnages and earnings in 1986 and 1987. In the medium term,

Table 9. Production of main cash crops and timber, 1980-84

('000 tons unless otherwise stated)

	1980	1981	1982	1983	1984
Palm oil	93.4	97.8	88.2	78.7	85.6
Palm kernels	27.2	33.9	28.3	22.3	25.3
Palm kernel oil	22.6	18.9	22.1	15.3	15.0
Robusta coffee	73.9	64.0	64.9	60.5	71.8
Arabica coffee	6.4	8.6	8.2	7.9	10.5
Rubber	21.3	20.2	17.3	15.0	15.8
Cotton fibres	9.7	8.0	8.3	8.5	9.7
Sugar cane	482.9	535.7	543.6	615.5	764.1
Timber (logs - '000 cu.m)	325.5	350.0	375.0	401.0	410.0

Source: Department of Agriculture.

significant investment is required for replanting. Rubber production has fallen over the 1980-84 period. Domestic consumption is currently running at about 2,000 tons per annum. The growing demand for sugar cane as a result of investment in the industry has already been noted in Section 2.2.

Forestry offers enormous potential in terms of exports and processing by the manufacturing sector. An immense equatorial forest, one of the last to be comprehensively exploited in the world, cuts right across the centre of the country and covers up to 50 per cent of the surface area of Zaire. SOFIDE approved loans totalling Z325 million in 1984 to the forestry sector. The private sector and the commercial banks have increasingly been drawn to the investment possibilities. Government regulations of late 1985 have introduced export quotas which are now tied to the installation of processing capacity. Output is set to rise steadily from 410,000 cubic metric logs in 1984.

Production trends in basic foodstuffs have been modestly encouraging. Department of Agriculture statistics show an increase in total production, commercial and subsistence, of maize from 666,000 tons in 1981 to 704,000 tons in 1984 and of rice from 254,000 tons to 286,000 tons in the same period. Data on the output of the staple food cassava is not available although it appears to have fallen short of domestic demand. This has necessitated imports of maize and wheat, absorbing Government spending of $54 million in 1983. The target of self-sufficiency in basic foodstuffs is a priority Government objective. While the export of cash crops is left to the private sector, the 1986-90 Plan has projected public sector investments in agriculture at Z20 billion with a marked emphasis on food crops.

4.3 Energy resources

Long term energy potential is enormous on account of the River Zaire, the second largest waterway in the world after the Amazon. Hydroelectric potential, estimated at as much as 100,000 MW, prompted the construction of the Inga complex and the siting of major industrial projects in Bas Zaire in the 1970s. Installed hydroelectric capacity in mid-1985 amounted to 2,480 MW, of which 1,770 MW was provided by Inga. The network of SNEL, the state electricity company, is concentrated on Kinshasa, Bas Zaire and Shaba, which together consumed 95 per cent of SNEL output in 1984. On a national level, wood and charcoal still supply most energy needs but the Plan projects investments by SNEL at Z15.6 billion in the 1986-90 period. Table 10 shows that use of hydroelectricity stood at 53 per cent of apparent consumption of commercial energy in 1983.

Oil reserves have been estimated at 140 million barrels and are currently exploited by two consortia, operating off the Atlantic coast and in the River Zaire estuary. Production reached a record 11.7 million barrels in 1984 and then 6.0 million barrels in the first half of 1985. All but a fraction of output is exported and petroleum products then imported. This is because Zairian oil is a heavy crude, suited to fuel oil and therefore to an industrialized country. There have also been technical difficulties at the Sozir refinery. Oil accounted for 38 per cent of commercial energy consumption in 1983.

Table 10. Commercial primary energy balance, 1983
('000 tons coal equivalent)

Production		**Apparent consumption**	
Solid fuels	130	Solid fuels	322
Crude petroleum/ natural gas liquids	1,669	Liquid fuels	1,303
Hydroelectricity	1,821	Hydroelectricity	1,821
		Less: exported electricity	-31
Total production	3,620	Total consumption	3,415
Imports		**Exports**	
Solid fuels	192	Crude petroleum	1,163
Crude petroleum	160	Petroleum products	48
Petroleum products	879	Electricity	31
Total imports	1,231	Total exports	1,242
		Bunkers	177
		Increase in crude stocks	12
		Balancing item	5
Total supply	4,851	Total demand	4,851

Source: UN Yearbook of World Energy Statistics 1983.

Gécamines mined 104,000 tons of coal in 1984 and imported to meet the balance of its needs. Lake Kivu in eastern Zaire has methane gas reserves and surveys are continuing to determine whether production is commercially viable. It will be clear that manufacturing activity has developed in regions with the greatest supplies of energy, Kinshasa, Bas Zaire and Shaba. The Plan for the sector addresses the need for a widespread electricity network without which the concentration of resources in the three regions can only increase.

4.4 Financial resources

Inadequate financial resources have constituted a serious constraint on the expansion of the Zairian manufacturing sector. Prior to 1983, the regulation of interest rates meant a yield for investors far below the rate of inflation and therefore a disincentive to save. Also an artificially high exchange rate for the Zaire created a tendency for potential domestic investors to think in terms of, and hold assets in foreign currency. Actual investment was naturally concentrated in an inflationary environment on projects that offered a short-term yield on capital, such as distribution, commerce and services, rather than the productive sector of the economy. The currency flotation, the liberalization of interest rates and the Government's anti-inflationary policy have removed the principal disincentives to invest beyond the short term.

Public sector companies are now expected to raise from internal sources a greater proportion of their investment needs. As noted in Section 2.2, these companies raised their tariffs substantially in 1983. The accounts of SNEL, the state electricity company, for 1983 show a net profit of Z20 million, after Z543 million in debt repayments of principal, on turnover of Z1,251 million. However, it is still assumed in the Plan that SNEL will not be able to generate sufficient cash from its operations to meet its interest repayments, which continue to be paid by the Treasury. Increased profitability will enable the company to accelerate its programme of capital spending. The manufacturing sector has experienced reduced liquidity since the recovery programme has had the effect of squeezing demand. Its profit margins have not widened although the foreign companies which dominate the sector have access to external finance to increase their resources for investment.

The Government signed a bilateral investment treaty with the United States in August 1984. This gives US companies in Zaire recourse to both Governments in the event of disputes and should remove an important barrier to US investment. Further treaties with other countries on the same lines are being sought. Other measures to improve the investment climate include the liberalization of profit repatriation, the offer of incentives to invest in ZOFI and the rewriting of the Investment Code. As the Government is confident of external support from bilateral and multilateral partners, so it is hopeful of substantial foreign private investment. In 1984 there was a net private capital outflow of $55 million.

4.5 Role of multilateral technical assistance.

Zaire actively seeks both technical and financial assistance. The OECD review for 1984 shows that ODA (Official Development Assistance) for Zaire in 1983 amounted to $314 million but that repayments under non-concessional agreements of $384 million left a net outflow of $70 million. Technical assistance to the industrial sector in 1985 has been estimated at $16.7 million or 15.5 per cent of the total. The principal projects were support for the agro-industrial sector ($6.3 million) and assistance for the palm oil processing plant at Gosuma ($2.3 million). Appendix B shows UNIDO's approved/operational technical co-operation projects in Zaire. The Government is currently negotiating with the World Bank over a proposed $75 million structural adjustment loan for the industrial sector: this would involve the BZ and SOFIDE acting as intermediaries to provide foreign currency for the import of key spare parts. The World Bank is also proposing an industrial sector adjustment credit to help the manufacturing sector obtain foreign exchange for essential inputs. Additional assistance is provided by the International Finance Corporation in the form of equity investments.

Based on the preceding analysis, the following observations are pertinent in the assessment of technical assistance projects, particularly favouring the SSIs. Zaire has immense natural resources and an innovative business community. The role of the State in the manufacturing sector, in terms of capital, is not considerable and is unlikely to increase at least in the short term because of budgetary constraints in the recovery programme. The private sector is the engine of industrial development and is represented by the employers' organization ANEZA. The 1986-90 Plan has established targets for private sector growth and calls for Government assistance in industrial promotion, extension of the infrastructure, decentralization of the manufacturing sector and the matching of natural and energy resources with sectoral needs. Wealth and employment opportunities are concentrated in Bas Zaire, Kinshasa and Shaba. Development finance is largely the responsibility of SOFIDE and the FCD. The commercial banks have low lending ceilings, the tendency to direct their loans towards their exporting customers (because of the foreign currency business) and the freedom to lend without any BZ directives as to sectoral priorities. Subregional export markets do exist and could be further developed, particularly Zambia and the Congo, which can be targeted from those regions where manufacturing capacity is already concentrated.

In this light, three main areas for technical assistance emerge. The first is to respond to the Government's call for support in economic management, restructuring of public enterprises and strengthening its planning capacity. The second is the processing of natural resources to increase MVA. Appendix Table A-2 indicates the modest level of processing, particularly of rubber and wood products, furniture, footwear and leather products. SSIs have a natural role in food processing and textiles, which, although already important in terms of MVA composition, can be expanded due to the currently high level of import penetration and to the rising population. The third area is machinery and equipment. The SSIs, even with access only to scrap, can produce basic agricultural equipment and spares through casting. They do have a role to play in engineering.

Appendix A

Statistical Tables

Table A-1. Growth of MVA by branch of manufacturing, 1973-81

Description (ISIC)	Growth of value added at 1975 prices 1973-1981
Food products (311)	-2.06
Beverages (313)	-10.27
Tobacco (314)	-9.73
Textiles (321)	-5.80
Wearing apparel, except footwear (322)	-5.27 a/
Leather products (323)	-10.28 a/
Footwear, except rubber or plastic (324)	-10.81
Wood products, except furniture (331)	-5.36
Furniture, except metal (332)	-6.27 a/
Paper and products (341)	-3.42 a/
Printing and publishing (342)	-6.46 a/
Industrial chemicals (351)	-2.37
Other chemicals (352)	-5.23
Petroleum refineries (353)	-11.77
Misc. petroleum and coal products (354)	...
Rubber products (355)	-4.89
Plastic products (356)	...
Pottery, china, earthenware (361)	-7.45
Glass and products (362)	-7.45
Other non-metallic mineral products (369)	-2.86
Iron and steel (371)	3.71
Non-ferrous metals (372)	-4.67
Fabricated metal products (381)	0.84
Machinery, except electrical (382)	-0.55 a/
Machinery, electric (383)	-0.55 a/
Transport equipment (384)	1.30
Professional and scientific equipment (385)	...
Other manufactured products (390)	-18.54 a/

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

a/ 1973-1980.

Table A-2. Composition of MVA (at 1975 prices), 1973-80
(percentages)

Description (ISIC)	1973	1974	1975	1976	1977	1978	1979	1980
TOTAL MANUFACTURING	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food products (311)	7.9	9.9	8.4	11.0	10.9	11.5	15.4	12.4
Beverages (313)	26.3	29.4	25.2	31.4	30.5	31.0	22.6	21.3
Tobacco (314)	7.5	7.9	6.1	5.5	6.7	8.8	6.1	5.8
Textiles (321)	5.1	5.0	4.3	8.0	6.2	4.5	5.8	6.3
Wearing apparel, except footwear (322)	3.5	3.3	3.5	4.6	4.4	4.7	4.1	4.2
Leather products (323)	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.3
Footwear, except rubber or plastic (324)	4.3	4.7	2.7	3.6	3.4	4.8	2.0	5.2
Wood products, except furniture (331)	2.2	2.0	1.6	1.8	2.1	2.0	2.0	2.3
Furniture, except metal (332)	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5
Paper and products (341)	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
Printing and publishing (342)	0.9	1.0	1.0	1.6	2.4	0.7	1.1	1.1
Industrial chemicals (351)	5.1	4.8	4.4	6.8	6.8	6.1	7.3	7.3
Other chemicals (352)	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3
Petroleum refineries (353)	7.4	7.3	5.8	5.0	3.1	2.9	6.2	5.3
Misc. petroleum and coal products (354)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rubber products (355)	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2
Plastic products (356)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pottery, china, earthenware (361)	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2
Glass and products (362)	0.5	0.5	0.4	0.5	0.5	0.5	0.4	0.5
Other non-metallic mineral products (369)	1.8	1.5	1.8	2.0	2.2	2.2	2.6	2.4
Iron and steel (371)	1.3	1.2	1.0	1.3	2.0	2.1	2.5	2.4
Non-ferrous metals (372)	1.2	1.1	0.9	1.0	1.1	1.0	1.2	1.3
Fabricated metal products (381)	1.3	1.8	1.6	1.3	1.6	1.3	2.1	2.9
Machinery, except electrical (382)	1.9	2.0	1.7	2.1	2.6	2.5	3.2	3.2
Machinery, electric (383)	1.0	1.1	0.9	1.1	1.4	1.3	1.7	1.7
Transport equipment (384)	1.3	1.9	2.1	2.5	2.4	2.8	2.8	3.2
Professional and scientific equipment (385)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other manufactured products (390)	18.0	12.3	25.4	7.2	7.9	7.7	9.2	9.3
TOTAL MANUFACTURING IN THOUSANDS US $	636614	655585	737320	492970	450678	461919	386781	383200

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

Table A-3. Product mix of traded manufactured goods, 1975, 1977, 1978*/

SITC	DESCRIPTION OF TRADE GOODS	EXPORTS 1975 PERCENT IN TOTAL	EXPORTS 1977 PERCENT MANUFACTURES	EXPORTS 1978 PERCENT	EXPORTS 1978 (1000 US $)	IMPORTS 1975 PERCENT IN TOTAL	IMPORTS 1977 PERCENT MANUFACTURES	IMPORTS 1978 PERCENT	IMPORTS 1978 (1000 US $)
01	Meat and meat preparations	0.000	...	0.009	55	2.739	2.292	4.009	27794
02	Dairy products and eggs	0.001	0.000	0.001	4	2.460	1.548	3.024	20965
032	Fish n.e.s. and fish preparations	0.000	...	...	...	1.835	1.943	2.077	14398
0422	Rice,glazed or polished not otherwise worked	0.001	0.003	0.001	4	0.000	0.005	0.035	240
046	Meal and flour of wheat or of meslin	0.030	0.000	...	...	0.089	0.186	0.149	1031
047	Meal and flour of cereals,except above	...	0.000	0.000	0	0.029	0.026	0.277	1918
048	Cereals preparat. & starch of fruits & vegetab.	...	0.001	...	...	3.099	2.354	2.020	14008
052	Dried fruit	...	...	...	...	0.006	0.000	0.003	19
053	Fruit,preserved and fruit preparations	...	...	...	...	0.082	0.055	0.073	505
055	Vegetables,roots & tubers,preserved or prepared	0.003	0.005	...	...	0.278	0.296	0.624	4327
06	Sugar,sugar preparations and honey	0.001	0.000	0.001	4	0.181	0.487	0.550	3815
0713	Coffee extracts,essences,concentrates & similar	...	...	...	...	0.027	0.002	0.001	7
0722	Cocoa powder,unsweetened	...	...	...	...	0.001	0.002	0.000	1
0723	Cocoa butter and cocoa paste	...	...	...	...	0.000	0.000	...	...
073	Chocolate and related food preparations	...	...	...	...	0.047	0.030	0.054	373
074	Tea and mate	0.546	0.930	0.543	3136	0.003	0.005	0.000	3
081	Feeding-stuff for animals	0.629	4.292	8.955	51741	0.117	0.107	0.119	825
09	Miscellaneous food preparations	0.000	0.001	0.002	9	0.435	0.579	0.688	4767
11	Beverages	0.000	0.001	0.001	7	0.387	0.201	0.243	1683
122	Tobacco manufactures	0.092	0.000	...	...	0.005	0.010	0.004	26
231	Crude rubber,synth. & reclaimed(excl.SITC 2311)	0.000	0.000	0.000	0	0.040	0.061	0.044	303
243	Wood,shaped or simply worked	0.332	0.705	0.749	4325	0.006	0.003	0.008	53
251	Pulp and waste paper	.	...	...	...	0.009	...	0.005	37
2629	Waste of wool and other animal hair n.e.s.	...	...	...	...	0.000	0.001	0.002	13
263	Cotton	0.093	...	...	...	0.039	1.336	0.295	2044
266	Synthetic and regenerated(artificial) fibres	...	...	...	...	0.024	0.235	0.041	285
267	Waste materials from textile fabrics(incl.rags)	...	...	0.000	3	0.214	0.709	0.564	3908
332	Petroleum products	0.871	0.255	0.114	658	5.472	9.131	6.713	46541
4	Animal and vegetable oils and fats	5.110	2.639	1.597	9228	0.165	0.177	0.084	583
411	Animal oils and fats	...	...	...	...	0.004	0.005	0.006	39
421	Fixed vegetable oils,soft(incl.SITC 422)	5.105	2.639	1.597	9228	0.154	0.155	0.068	468
431	Animal and vegetable oils and fats processed	...	...	...	...	0.007	0.017	0.011	76

Table A-3 (continued)

SITC	DESCRIPTION OF TRADE GOODS	EXPORTS 1975 PERCENT IN TOTAL MANUFACTURES	EXPORTS 1977 PERCENT IN TOTAL MANUFACTURES	EXPORTS 1978 PERCENT IN TOTAL MANUFACTURES	EXPORTS 1978 (1000 US $)	IMPORTS 1975 PERCENT IN TOTAL MANUFACTURES	IMPORTS 1977 PERCENT IN TOTAL MANUFACTURES	IMPORTS 1978 PERCENT IN TOTAL MANUFACTURES	IMPORTS 1978 (1000 US $)
5	Chemicals	0.268	0.309	0.320	1849	12.022	12.557	11.826	81996
51	Chemicals elements and compounds	0.082	0.167	0.221	1274	3.571	3.084	2.709	18785
52	Tar and chemicals from coal,petroleum,nat. gas	...	...	...	...	0.063	0.029	0.016	113
53	Dyeing,tanning and colouring materials	0.000	0.000	...	...	1.297	1.609	1.119	7760
54	Medicinal and pharmaceutical products	0.181	0.135	0.095	549	2.795	3.508	3.003	20823
55	Essential oils and perfume materials	0.006	0.002	0.004	26	0.525	0.379	0.416	2882
56	Fertilizers,manufactured	...	...	...	...	0.703	0.761	0.837	5805
57	Explosives and pyrotechnic products	...	0.005	...	...	0.306	0.499	0.515	3571
58	Plastic materials,regenerated cellul. & resins	...	...	...	...	1.635	1.378	1.821	12623
59	Chemical materials and products n.e.s.	0.000	...	...	...	1.127	1.311	1.390	9634
6	Manufactured goods classified by material	90.928	89.627	86.666	500739	25.327	23.871	24.249	168127
61	Leather manufactured n.e.s. & dressed fur skins	0.001	0.000	0.000	0	0.165	0.091	0.075	520
62	Rubber manufactures n.e.s.	0.001	0.002	0.000	2	1.189	1.305	1.469	10182
63	Wood and cork manufactures(excl.furniture)	0.136	0.090	0.453	2618	0.329	0.215	0.179	1242
64	Paper,paper board and manufactures thereof	0.000	0.000	0.006	34	2.215	2.015	2.468	17111
65	Textile yarn,fabrics,made-up articles	0.008	0.252	0.011	65	6.688	6.724	6.029	41800
66	Non-metallic mineral manufactures,n.e.s.	7.148	4.475	6.130	35417	1.448	1.792	1.568	10873
67	Iron and steel	0.000	0.015	0.035	200	5.519	3.467	4.255	29502
68	Non-ferrous metals	83.609	84.754	80.010	462282	0.473	0.577	1.016	7045
69	Manufactures of metal,n.e.s.	0.025	0.039	0.021	120	7.301	7.686	7.190	49853
7	Machinery and transport equipment	0.870	0.949	0.913	5274	37.989	36.960	36.416	252481
71	Machinery,other than electric	0.472	0.251	0.191	1102	14.586	12.404	18.206	126225
72	Electrical machinery,apparatus and appliances	0.037	0.119	0.433	2504	8.686	13.216	8.153	56528
73	Transport equipment	0.361	0.579	0.289	1668	14.717	11.340	10.057	69728
8	Miscellaneous manufactured articles	0.224	0.285	0.129	746	6.874	4.831	5.806	40252
81	Sanitary,plumbing,heating & lightning fixtures	...	...	...	...	0.571	0.526	0.735	5099
82	Furniture	0.005	0.037	0.027	156	0.236	0.560	0.343	2378
83	Travel goods,handbags and similar articles	...	...	...	...	0.178	0.068	0.085	589
84	Clothing	0.000	0.001	0.001	7	1.979	0.921	1.066	7388
85	Footwear	0.000	0.000	...	...	0.911	0.480	0.554	3843
86	Professional,scient. & controll. instruments	0.025	0.009	0.013	74	1.101	0.740	0.828	5740
89	Miscellaneous manufactured articles,n.e.s.	0.194	0.239	0.088	510	1.900	1.537	2.195	15216

	EXPORTS 1975	EXPORTS 1977	EXPORTS 1978	IMPORTS 1975	IMPORTS 1977	IMPORTS 1978
TOTAL MANUFACTURES	660096	721308	577781	803502	756542	693328
TOTAL: SITC 5-8 LESS 68 a/	57304	46277	46325	656777	587395	535812
TOTAL TRADED GOODS: SITC 0-9	864841	1109951	899362	932821	852308	796714

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 4-A. Destination of exports of manufactures by branches, 1978

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	55	14.68	85.32	0.00	85.32	0.00	0.00
02	Dairy products and eggs	4	23.47	0.00	0.00	0.00	0.00	0.00
0422	Rice,glazed or polished not otherwise worked	4	100.00	0.00	0.00	0.00	0.00	0.00
047	Meal and flour of cereals,except above	0	0.00	100.00	0.00	100.00	0.00	0.00
06	Sugar,sugar preparations and honey	4	44.67	0.00	0.00	0.00	0.00	0.00
074	Tea and mate	3136	6.06	92.24	0.00	89.18	0.00	0.00
081	Feeding-stuff for animals	51741	1.84	98.01	12.65	46.51	0.00	0.00
09	Miscellaneous food preparations	9	0.00	100.00	0.00	97.27	0.00	0.00
11	Beverages	7	96.69	3.31	0.00	3.31	0.00	0.00
231	Crude rubber,synth. & reclaimed(excl.SITC 2311)	0	0.00	0.00	0.00	0.00	0.00	0.00
243	Wood,shaped or simply worked	4325	1.14	98.04	3.41	93.64	0.00	0.82
267	Waste materials from textile fabrics(incl.rags)	3	100.00	0.00	0.00	0.00	0.00	0.00
332	Petroleum products	658	0.00	12.87	0.00	12.87	0.00	0.00
4	Animal and vegetable oils and fats	9228	13.00	87.00	0.00	81.89	0.00	0.00
421	Fixed vegetable oils,soft(incl.SITC 422)	9228	13.00	87.00	0.00	81.89	0.00	0.00
5	Chemicals	1849	3.11	96.20	0.25	64.93	0.00	0.00
51	Chemicals elements and compounds	1274	1.32	98.01	0.33	94.19	0.00	0.00
54	Medicinal and pharmaceutical products	549	3.50	96.50	0.09	0.04	0.00	0.00
55	Essential oils and perfume materials	26	82.92	0.75	0.00	0.75	0.00	0.00
6	Manufactured goods classified by material	500739	3.32	87.25	0.13	79.10	0.00	1.86
61	Leather manufactured n.e.s. & dressed fur skins	0	0.00	100.00	0.00	100.00	0.00	0.00
62	Rubber manufactures n.e.s.	2	0.00	100.00	0.00	100.00	0.00	0.00
63	Wood and cork manufactures(excl.furniture)	2618	18.83	74.31	0.73	71.54	0.28	0.34
64	Paper,paper board and manufactures thereof	34	99.50	0.50	0.00	0.22	0.00	0.00
65	Textile yarn,fabrics,made-up articles	65	17.26	17.68	0.09	5.73	0.00	0.40
66	Non-metallic mineral manufactures,n.e.s.	35417	6.59	83.33	0.00	76.78	0.00	0.00
67	Iron and steel	200	97.91	2.09	0.45	1.44	0.00	0.00
68	Non-ferrous metals	462282	2.94	87.68	0.14	79.37	0.00	2.01
69	Manufactures of metal,n.e.s.	120	3.43	94.15	0.25	78.05	2.92	1.20
7	Machinery and transport equipment	5274	45.75	53.68	4.52	25.06	0.00	0.00
71	Machinery,other than electric	1102	26.34	73.57	0.45	35.77	0.00	0.00
72	Electrical machinery,apparatus and appliances	2504	76.48	22.42	4.26	14.83	0.00	0.00
73	Transport equipment	1668	12.44	87.45	7.61	33.35	0.00	0.00
8	Miscellaneous manufactured articles	746	32.34	50.64	8.22	32.02	0.75	0.12
82	Furniture	156	6.33	36.70	0.17	20.87	0.00	0.00
84	Clothing	7	43.43	33.16	0.00	0.00	0.00	0.00
86	Professional,scient. & controll. instruments	74	0.00	99.51	38.67	51.95	0.12	0.00
89	Miscellaneous manufactured articles,n.e.s.	510	44.79	48.07	6.39	32.99	1.08	0.17
	TOTAL manufactures	577781	3.77	87.90	1.32	75.71	0.00	1.62
	TOTAL: SITC 5-8 LESS 68 a/	46325	12.49	78.96	0.70	68.93	0.04	0.03
	TOTAL traded goods: SITC 0-9	899362	2.94	91.35	3.61	70.63	1.84	1.04

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-5. Origin of imports of manufactures by branches, 1978*/

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	27794	16.13	82.38	0.89	34.39	1.40	0.06
02	Dairy products and eggs	20965	3.89	95.05	0.44	76.92	0.00	0.00
032	Fish n.e.s. and fish preparations	14398	22.97	74.92	0.00	3.23	38.88	0.01
0422	Rice,glazed or polished not otherwise worked	240	0.00	100.00	0.00	0.00	0.00	0.00
046	Meal and flour of wheat or of meslin	1031	39.33	57.93	2.60	54.46	0.00	0.00
047	Meal and flour of cereals,except above	1918	0.65	99.35	1.03	78.24	0.00	0.00
048	Cereals preparat. & starch of fruits & vegetab.	14008	4.11	95.81	0.03	82.08	0.00	0.00
052	Dried fruit	19	0.00	100.00	0.00	100.00	0.00	0.00
053	Fruit,preserved and fruit preparations	505	13.52	86.48	0.63	45.29	0.00	0.00
055	Vegetables,roots & tubers,preserved or prepared	4327	13.89	85.28	0.00	40.19	0.00	0.00
06	Sugar,sugar preparations and honey	3815	4.83	95.17	7.43	70.92	0.00	0.00
0713	Coffee extracts,essences,concentrates & similar	7	48.04	51.69	0.00	36.44	0.00	0.00
0722	Cocoa powder,unsweetened	1	0.00	100.00	0.00	100.00	0.00	0.00
073	Chocolate and related food preparations	373	26.23	73.77	3.67	48.39	0.00	0.00
074	Tea and mate	3	100.00	0.00	0.00	0.00	0.00	0.00
081	Feeding-stuff for animals	825	2.51	97.49	16.18	41.04	0.00	0.00
09	Miscellaneous food preparations	4767	1.84	97.94	20.62	67.33	0.29	0.00
11	Beverages	1683	0.84	98.70	5.23	54.98	0.36	0.46
122	Tobacco manufactures	26	0.00	100.00	60.39	39.61	0.00	0.00
231	Crude rubber,synth. & reclaimed(excl.SITC 2311)	303	0.00	100.00	81.18	18.82	0.00	0.00
243	Wood,shaped or simply worked	53	6.77	93.23	0.00	7.64	53.76	0.00
251	Pulp and waste paper	37	0.24	99.76	0.00	99.76	0.00	0.00
2629	Waste of wool and other animal hair n.e.s.	13	0.00	100.00	0.00	100.00	0.00	0.00
263	Cotton	2044	83.59	16.41	0.00	16.41	0.00	0.00
266	Synthetic and regenerated(artificial) fibres	285	0.00	100.00	0.00	83.46	0.00	0.00
267	Waste materials from textile fabrics(incl.rags)	3908	0.00	99.91	75.76	23.99	0.03	0.00
332	Petroleum products	46541	39.48	60.22	2.32	30.08	0.12	0.06
4	Animal and vegetable oils and fats	583	33.77	66.23	3.68	37.74	0.21	0.00
411	Animal oils and fats	39	0.22	99.78	0.00	93.66	0.00	0.00
421	Fixed vegetable oils,soft(incl.SITC 422)	468	42.04	57.96	0.00	32.28	0.27	0.00
431	Animal and vegetable oils and fats processed	76	0.00	100.00	28.22	42.72	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	81996	2.58	96.12	4.67	70.45	0.47	0.21
51	Chemicals elements and compounds	18785	4.15	95.57	7.41	70.93	0.39	0.01
52	Tar and chemicals from coal,petroleum,nat. gas	113	0.00	100.00	5.28	94.72	0.00	0.00
53	Dyeing,tanning and colouring materials	7760	0.38	99.61	1.75	59.55	1.39	0.00
54	Medicinal and pharmaceutical products	20823	2.29	93.96	2.19	66.35	0.01	0.45
55	Essential oils and perfume materials	2882	5.85	93.52	0.47	70.17	0.04	0.00
56	Fertilizers,manufactured	5805	0.00	99.39	10.16	86.68	0.00	0.00
57	Explosives and pyrotechnic products	3571	4.37	95.63	0.33	47.32	0.00	0.00
58	Plastic materials,regenerated cellul. & resins	12623	2.01	97.19	0.72	85.59	0.50	0.61
59	Chemical materials and products n.e.s.	9634	2.62	96.62	11.77	65.94	1.47	0.00
6	Manufactured goods classified by material	168127	8.01	85.14	4.74	58.14	5.77	2.45
61	Leather manufactured n.e.s. & dressed fur skins	520	11.07	88.86	1.56	68.51	0.00	0.00
62	Rubber manufactures n.e.s.	10182	0.68	94.35	14.09	58.76	10.44	4.16
63	Wood and cork manufactures(excl.furniture)	1242	0.14	99.54	4.80	86.96	0.30	0.00
64	Paper,paper board and manufactures thereof	17111	3.90	93.51	0.66	37.38	0.23	1.38
65	Textile yarn,fabrics,made-up articles	41800	14.31	66.10	4.84	47.99	9.75	4.03
66	Non-metallic mineral manufactures,n.e.s.	10873	11.64	85.73	2.77	54.80	0.78	1.86
67	Iron and steel	29502	3.60	95.95	2.87	61.05	11.39	0.38
68	Non-ferrous metals	7045	13.82	86.18	0.31	76.57	0.00	0.00
69	Manufactures of metal,n.e.s.	49853	6.81	89.28	6.34	69.24	2.17	2.92
7	Machinery and transport equipment	252481	1.73	97.28	19.80	66.39	2.19	0.34
71	Machinery,other than electric	126225	2.24	97.12	25.91	60.19	1.06	0.14
72	Electrical machinery,apparatus and appliances	56528	1.60	96.97	13.27	76.74	1.11	0.19
73	Transport equipment	69728	0.91	97.83	14.04	69.23	5.10	0.84
8	Miscellaneous manufactured articles	40252	16.06	78.63	4.64	62.82	3.06	1.18
81	Sanitary,plumbing,heating & lightning fixtures	5099	16.46	76.31	3.33	60.25	2.06	6.72
82	Furniture	2378	19.29	75.10	11.21	62.82	0.06	0.00
83	Travel goods,handbags and similar articles	589	59.70	36.35	0.00	29.24	6.90	0.00
84	Clothing	7388	41.36	47.24	2.22	22.51	9.39	0.55
85	Footwear	3843	15.44	78.17	0.25	61.37	1.01	0.00
86	Professional,scient. & controll. instruments	5740	2.38	96.44	16.76	72.72	2.07	0.54
89	Miscellaneous manufactured articles,n.e.s.	15216	6.77	90.24	1.93	81.19	1.55	0.40
	TOTAL manufactures	693328	8.28	89.07	10.08	59.62	3.31	0.82
	TOTAL: SITC 5-8 LESS 68 a/	535812	4.75	92.04	11.88	64.02	3.15	1.05
	TOTAL traded goods: SITC 0-9	796714	12.84	84.67	11.65	53.35	2.94	0.73

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. Shares of exports and imports classified according to level of processing, 1975 and 1978, and trend growth rates, 1975-1977 and 1977-1978

CLASSES	EXPORTS				IMPORTS			
	CLASS SHARE OF TOTAL (PERCENTAGE)		CLASS GROWTH RATE (PERCENTAGE)		CLASS SHARE OF TOTAL (PERCENTAGE)		CLASS GROWTH RATE (PERCENTAGE)	
	1975	1978	1975-1977	1977-1978	1975	1978	1975-1977	1977-1978
A : Non-processed goods for further processing	28.37	43.06	34.11	-11.73	10.36	8.95	-9.07	-11.29
B : Processed goods for further processing	68.80	53.27	4.13	-25.32	14.03	12.13	-6.57	-15.93
C : Non-processed goods for final use	0.43	0.36	35.91	-52.75	4.20	5.48	-8.30	31.66
D : Processed goods for final use	2.41	3.31	4.48	31.82	71.41	73.44	-2.99	-7.26

	Exports 1975	Exports 1978	Imports 1975	Imports 1978
Sum of classes: A+B+C+D in 1000 current US$	858573	897936	930042	789333
Total trade SITC 0-9 in 1000 current US$	864841	899362	932821	796714

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-7. Average apparent consumption of selected manufactures, 1981-1983

Product grouping and commodity (ISIC)		Unit	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	1 83	2 6	0 0	53667	-2 03
Refined sugar (311804)	a/	M	2 01	10 7	0 0	53237	-1 35
Cocoa powder (311907)	a/	W	0 00	100 0	0 0	0	-25 68
Cocoa butter (311910)		W	0 00			0	121 59
Chocolate and chocolate products (311913)		W					
Prepared animal feeds (312201)	a/	W	1 47	4 8	0 0	41424	14 18
OILS AND FATS							
Oils and fats of animals, unprocessed (311507)		W					
Oils of vegetable origin (311510*)		W	6 35	0 3	10 2	209468	1 19
TEXTILES							
Wool yarn, pure and mixed (321103)		W					
Cotton yarn, pure and mixed (321109)		W					
Cotton woven fabrics (321128)	a/	S	3032 37	0 9	0 1	89077368	1 38
Woollen woven fabrics (321134)	a/	S	1 31	100 0	0 0	0	-6 08
Knitted fabrics (321301)		W				.	
FOOTWEAR							
Footwear, excluding rubber footwear (324000)	a/	P	74 09	22 4	0 0	1700686	-19 08
WOOD AND WOOD PRODUCTS							
Veneer sheets (331110)		V	0 18	0 1	91 2	9000	-9 20
Particle board (331122)		V	0 02	5 4	0 0	667	18 14
PAPER AND PAPER PRODUCTS							
Wood pulp, mechanical (341101)		W	0 00			0	
Pulp of fibres other than wood (341104)		W	0 00	100 0	0 0	0	
Wood pulp, dissolving grades (341107)		W	0 00	100 0	0 0	0	
Wood pulp, sulphate and soda (341110)		W	0 00	100 0	0 0	0	-18 72
Wood pulp, sulphite (341113)		W	0 00	100 0	0 0	0	
Wood pulp, semi-chemical (341116)		W	0 00			0	
Newsprint (341119)		W					5 49
Other printing and writing paper (341122)		W					-11 07
Kraft paper and kraft paperboard (341125)		W					-28 05
Other paper and paperboard (341131)	a/	W	0 10	30 7	0 0	2000	0 10
INDUSTRIAL CHEMICALS							
Methanol (methyl alcohol) (351121)		W					-51 39
Glycerine (glycerol) (351125)	a/	W	0 01	7 7	118 2	835	13 71
Chlorine (351145)		W	0 00	100 0	0 0	0	-52 13
Sulphuric acid (351147)	a/	W	4 79	0 2	0 0	141500	-5 02
Nitric acid (351149)		W	0 00	129 0	29 0	0	-12 67
Zinc oxide (351154)		W	0 00	100 0	0 0	0	-27 49
Titanium oxides (351155)		W					-23 31
Lead oxides (351157)	b/	W	0 00	100 0	0 0	0	4 77
Ammonia (351158)		W	0 00	100 0	0 0	0	5 41
Caustic soda (351159)		W	0 23	100 0	0 0	0	-3 96
Soda ash (351166)		W	0 07	100 0	0 0	0	6 39
Hydrogen peroxide (351171)		W					-28 63
Calcium carbide (351173)		W					-20 97
Dyestuffs, synthetic (351174)		W					-11 73
Vegetable tanning extracts (351175)		W					
Nitrogenous fertilizers (351201)		M	0 11	100 0	0 0	0	-6 94
Phosphatic fertilizers (351204 + 351207)		M	0 08	100 0	0 0	0	-8 75
Potassic fertilizers (351210)		M	0 09	100 0	0 0	0	10 18
Insecticides, fungicides, etc (351216)	a/	W	0 04	70 9	0 0	387	-10 41
Rubber, synthetic (351301)		W	0 01	100 0	0 0	0	-5 48
Non-cellulosic staple and tow (351304)		W	0 00	100 0	0 0	0	-18 84
Regenerated cellulose (351331)		W	0 01	100 0	0 0	0	-7 88

=======> continued

Table A-7 (continued)

Product grouping and commodity (ISIC)		Unit	Average apparent consumption per 1000 inhabitants	Imports: As percentage of apparent consumption	Exports: As percentage of apparent consumption	Average annual production	Growth rate of apparent consumption
			1981-1983	1981-1983	1981-1983	1981-1983	1975-1983
PETROLEUM REFINERIES							
Motor gasolene (353007A)		W	5 99	75 8	0 0	44000	1 07
Kerosene (353013A)		W	2 87	45 2	0 0	44000	-1 95
Distillate fuel oils (353019A)		W	11 93	75 2	0 0	89000	9 12
Residual fuel oils (353022A)	c/	W	4 75	18 1	36 3	151000	5 76
Lubricating oils (353025A)		W					
Liquefied petroleum gas (353037A)		W					
GLASS AND CEMENT							
Glass bottles and containers (362010B)	a/	W	' 11	9 9	0 1	2910	-7 98
Cement (369204)		W	' 48	0 5	0 0	402667	-8 06
IRON AND STEEL							
Pig iron (371007 + 371010)		W					12 38
Wire rods (371028)		W					
Angles, shapes and sections (371035)		W					
Plates(heavy), over 4 75 mm (371040)		W	0 22	100 0	0 0	0	86 54
Plates(medium), 3 to 4 75 mm (371043)		W	0 07	100 0	0 0	0	16 38
Plates and sheets, < 3 mm (371046 + 371049 + 371052)		W					11 25
Tinplate (371055)		W	0 02	105 8	5 8	0	13 18
Railway track material (371067)		W	0 24	100 0	0 0	0	3 44
Wire, plain (371070)		W					-14 82
Tubes, seamless (371076)	a/	W	0 12	100 1	0 1	0	2 47
Tubes, welded (371079)		W	0 13	100 0	0 0	0	-3 42
Steel castings in the rough state (371085)		W					
Steel forgings (371088)		W					
NON-FERROUS METALS							
Copper, refined, unwrought (372004)	d/	W	0 30	0 1	2332 2	226700	
Copper bars, rods, angles, etc (372010 + 372013)		W					
Copper plates, sheets, strip and foil (372016)		W					
Copper tubes and pipes (372019)		W					
Aluminium, unwrought (372022)		W					
Aluminium bars, rods, angles, etc (372025 + 372028)		W					
Aluminium plates, sheets, strip etc (372031)		W	0 03	100 0	0 0	0	0 02
Aluminium tubes and pipes (372034)		W					-25 03
Lead, refined, unwrought (372037)		W					34 41
Zinc, unwrought (372043)		W	0 92	0 0	131 6	84066	10 81
Zinc plates, sheets, strip and foil (372046)		W	0 00	100 0	0 0	0	-1 64
Tin, unwrought (372049)		W	0 01	0 9	68 2	312	17 04

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

Note: ISIC 311510* 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

Footnotes:
a/ Data for 1983 not available
b/ Data for 1981 only
c/ Data for 1982 not available
d/ Data for 1983 only

Table A-8. Major bilateral and multilateral technical and capital assistance to industry, 1985
(in US $)

A. Bilateral assistance

Source	Technical assistance	Capital assistance	Purpose
Belgium	6,331,000	1,780,000	Agro-industrial sector
Canada	192,000		Assistance to small medium size enterprises
USA	502,000		Technical assistance
France	1,118,000		Technical assistance, i.e. to ZOFI
F.R. Germany	315,000		Loan to SOFIDE

B. Multilateral assistance

Source	Loans	Technical Assistance	Capital assistance	Purpose
Banque Africaine de Développement	4,965,000			Lines of crédit to SOFIDE
	2,483,000			Loan to REGIDESO
Communauté Economique Européenne	167,000	2,286,000	23,598,000	Soft loan to huilerie de GOSUME
Fonds Monétaire International	177,000,000			Financial assistance
Banque Mondiale	58,490,000			Technical assistance and line of credit to SOFIDE

Appendix B. The 20 leading industrial companies in Zaire in 1984

	Company	Principal activities	Turnover in 1984 (Z millions)
1.	Gécamines*	Mining of copper and cobalt	34,058
2.	Zaire Gulf	Offshore oil exploration	10,037
3.	Petrozaire*	Import of petroleum products	9,407
4.	SNCZ*	Operation of railways	4,861
5.	Onatra*	Operation of river transport and ports	3,769
6.	SNEL*	Electrical supply	2,686
7.	MIBA	Diamond mining	2,100
8.	Bralima	Brewing and soft drinks production	2,018
9.	Regideso*	Water supply	1,851
10.	Tabazaire	Manufacture of cigarettes	1,715
11.	Air Zaire*	Air transport	1,672
12.	Plantations Lever	Palm and rubber plantations	1,578
13.	Groupe Hasson	Textiles and general trading	1,485
14.	Unibra	Brewing and soft drinks production	1,472
15.	CMZ*	Operation of maritime transport	1,436
16.	Seaza	Construction	1,178
17.	Midema	Flour milling	1,144
18.	Solbena	Textiles and general trading	1,055
19.	Brasimba	Brewing and soft drinks production	1,038
20.	Zairep	Onshore oil exploration	991

Source: Conjoncture Economique.

* Company wholly owned by the State.

Appendix C

The approved and/or operational technical co-operation projects of UNIDO

Backstopping responsibility (Spec.Act.Code)		Project number	Project title
PC/FLD	(30.4.Z)	DP/ZAI/83/013	Poste de conseiller principal hors-siège pour le développement industriel
IO/INFR	(31.3.0)	DP/ZAI/81/014**	Développement des petites et moyennes entreprises (PME) zairoises, spécialement dans la région du Kivu
IO/FCTY	(31.4.E)	DP/ZAI/81/011**	Amélioration de la gestion financière et administrative des entreprises relevant du Ddpartement du Portefeuille (continuation of DP/ZAI/75/011)
IO/FEAS	(31.6.A)	DP/ZAI/84/016	Etude de la faisabilité pour la production de pompes hydrauliques manuelles au Zaire
IO/FEAS	(31.6.B)	DP/ZAI/81/015*	Mise en place et fonctionnement de la Zone Franche d'Inga (ZOFI)
IO/AGRO	(31.7.F)	DP/ZAI/81/013**	Valorisation des produits agricoles nationaux (IRS, Lubumbashi) (continuation of DP/ZAI/71/539)
IO/CHEM	(32.1.C)	SI/ZAI/82/802	Production of salt for human consumption
IO/CHEM	(32.1.D)	DP/ZAI/85/015	Mission préparatoire à l'industrie pharmaceutique

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

** Total allotment $1 million or above.

Selected References

Africa Economic Digest, Survey of Zaire, September 1985.

Banque du Zaire, *Rapport Annuel*, 1984-85.

Département de l'Agriculture, *Bulletins*.

Département de l'Economie Nationale et de l'Industrie, *Conjoncture Economique*, 1985.

Département des Mines et de l'Energie, *Bulletins*.

Département du Plan, *Recensement Scientifique*, July 1984, and *Premier Plan Quinquennal, 1986-90*.

The Economist Intelligence Unit, Special Report No. 227, *"Zaire to the 1990s: will retrenchment work?"*, and various *Quarterly Economic Reviews*.

Financial Times, Survey of Zaire, July 1985.

Gécamines, *Rapport Annuel*, 1984.

Société Financière de Développement, *Rapport Annuel*, 1984.

UN Yearbook of World Energy Statistics, 1983.

World Bank, *World Development Report*, 1985.

Fold 1

AEROGRAMME

Return Address:

STAMP

Regional and Country Studies Branch (D2036)
United Nations Industrial Development Organization
P.O. Box 300
A-1400 Vienna
AUSTRIA

Fold 2

Please close with staples

Dear Reader,

Would you like to have your name included in the mailing list for the *Country Industrial Development Review Series?*

In order to make future issues more relevant and informative and to aid in the updating and revision of the *Reviews*, the staff of the Regional and Country Studies Branch solicit your comments and suggestions. We would therefore appreciate your response to the questions listed below. Please return this pre-addressed form to UNIDO (as an aerogramme—no envelope needed).

Industrial Development Review of ZAIRE

(a) Do you consider the *Industrial Development Review:*

	Check
Very important	☐
Useful	☐
Of little importance	☐

(b) For which particular purpose is the *Review* useful? __________

(c) Suggest additional topics to be covered or additional emphasis on specific subject: __________

(d) Criticism of analyses and other comments: __________

(e) Which of the following activities are you involved in?

	Check
Government policy making	☐
International aid	☐
Business/industry	☐
Industrial institution	☐
Academic research	☐
Journalism	☐
Other (please specify)	☐

(f) Would you like to receive *Reviews* on:

	Check
Asia and Pacific countries	☐
West Asian (Arab) countries	☐
African countries	☐
Latin American countries	☐
All developing regions referred to above	☐
Specific countries (please specify)	☐

(g) Please send future *Reviews* to the following address:

__________ (Name)

__________ (Occupation, title)

__________ (Organization)

__________ (District, city)

__________ (P.O. Box)

__________ (Country)

Previously issued in the Industrial Development Review Series:

Indonesia	UNIDO/IS.458	1984
Kenya	UNIDO/IS.459	1984
Argentina	UNIDO/IS.460	1984
Paraguay	UNIDO/IS.461	1984
Uruguay	UNIDO/IS.462	1984
Bangladesh	UNIDO/IS.510	1985
Swaziland	UNIDO/IS.516	1985
Zambia	UNIDO/IS.520	1985
The Philippines	UNIDO/IS.527	1985
Pakistan	UNIDO/IS.535	1985
The Sudan	UNIDO/IS.541	1985
Malaysia	UNIDO/IS 545	1985
India	UNIDO/IS.547	1985
Thailand	UNIDO/IS.548	1985
Peru	UNIDO/IS.552	1985
Nigeria	UNIDO/IS.557	1985
Bolivia	UNIDO/IS.564	1985
Chile	UNIDO/IS.579	1985
The People's Republic of China	UNIDO/IS.582	1985
Bahrain	UNIDO/IS.592	1985
Sri Lanka	UNIDO/IS.613	1986
Cuba	UNIDO/IS.615	1986
Tanzania	UNIDO/IS.628	1986
Egypt	UNIDO/IS.637	1986
Mali	UNIDO/IS.640	1986